



Third party audit of Environmental Protection and Biodiversity Conservation Upstream Approval (EPBC 2008/4398)

Queensland Curtis Liquefied Natural Gas (QCLNG) project

29 April 2015

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/au/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

Liability limited by a scheme approved under Professional Standards Legislation.

Member of Deloitte Touche Tohmatsu Limited

Contents

Contents..... 1

1 Audit opinion 1

2 Activated conditions 3

3 Summary of Non-Compliances and Associated Recommendations 4

4 Improvement opportunities 8

Appendix 1: Audit Criteria & Methodology 13

Appendix 2: Significant Species Management Plans (SSMP) Checklist 44

Appendix 3: Constraints Planning and Field Development Protocol Checklist 77

Appendix 4: Evidence list104

Amanda Delaney
Manager Environmental Compliance
QGC Pty Limited
Level 30, 275 George Street
BRISBANE QLD 4000

29 April 2015

Dear Amanda

Re: Environmental compliance audit of EPBC 2008/4398 Upstream Approval Queensland Curtis LNG (QCLNG) Project

We include in the attached report the findings from our independent environmental compliance audit conducted in accordance with condition 100 of the Commonwealth Environment Protection and Biodiversity Conservation (EPBC) Upstream Approval (EPBC 2008/4398) as directed by the letter received from the Department of the Environment (Department) dated 5 February 2014.

Our work has been conducted in accordance with applicable Australian Standards on Assurance Engagements ASAE 3100 Compliance Engagements, issued by the Australian Auditing and Assurance Standards Board. The matters raised in this report are only those which came to our attention during the course of performing our procedures.

Our report incorporates the comments received from the Department on 13 March 2015. Our report has been prepared for the use of QGC Pty Limited for the sole purpose of reporting on the matter being audited in accordance with condition 100 of EPBC 2008/4398. We understand that a copy will also be provided to the Department. No responsibility to any other party shall be accepted, as our report was not prepared, and shall not be intended, for any other purpose.

Sincerely

DELOITTE TOUCHE TOHMATSU

Deloitte Touche Tohmatsu



Stephen Tarling
Partner
Assurance & Advisory

1 Audit opinion

Independent Assurance Report to the Directors of QGC Pty Ltd and the Department of the Environment

We have been engaged by QGC Pty Ltd (“QGC”) to conduct a reasonable assurance engagement relating to QGC’s compliance with conditions 3 to 13 and 20 to 26 (“the Conditions”) as set out in the approval granted to develop, construct, operate and decommission the coal seam gas component of the Queensland Curtis LNG Project, including expansion of the QGC operated Coal Seam Gas fields in the Surat basin - “Queensland Curtis LNG Project” – EPBC 2008/4398, as at 29 April 2015.

The Responsibility of the Directors for Compliance with the Conditions

The Directors of QGC are responsible for compliance with the Conditions. This responsibility includes establishing and maintaining internal control relevant to compliance with the Conditions.

Our Responsibility

Our responsibility is to express a conclusion on the entity’s compliance with the Conditions, based on our procedures. Our engagement has been conducted in accordance with applicable Australian Standards on Assurance Engagements ASAE 3100 *Compliance Engagements*, issued by the Australian Auditing and Assurance Standards Board, in order to state whether, in all material respects, QGC has complied with the Conditions as at 4 December 2014. ASAE 3100 also requires us to comply with the relevant ethical requirements of the Australian professional accounting bodies.

Our procedures included;

- Desktop review of Queensland Curtis LNG Project documentation and examination of third party reports and plans
- Performing interviews with relevant stakeholders
- Performing site inspection in the project area conducted on 16 September 2014.

Please refer to Appendix 1 for verification methods, measurements made and findings for each of the Conditions.

Limitation on Use

This report has been prepared for the Directors of QGC and the Department of the Environment in accordance with the directive for audit of the Conditions made by the Department of the Environment to QGC on 5 February 2014. We disclaim any assumption of responsibility for any reliance on this report to any persons or users other than the Directors of QGC and the Department of the Environment or for any purpose other than that for which it was prepared.

Inherent Limitations

Because of the inherent limitations of any compliance procedure, it is possible that fraud, error or non-compliance may occur and not be detected. A reasonable assurance engagement is not designed to detect all instances of non-compliance with the Conditions, as the engagement is not performed continuously throughout the period and the procedures performed in respect of compliance with the Conditions are undertaken on a test basis.

The conclusion expressed in this report has been formed on the above basis.

Independence

In conducting our engagement, we have complied with the independence requirements of the Australian professional accounting bodies.

Reportable Exceptions

Please refer to section 3 for the exceptions identified to compliance with the Conditions.

Conclusion

In our opinion, except for the matters noted in the "Reportable Exceptions" section above, QGC has complied, in all material respects, with the Conditions as at 29 April 2015.

Debitte Touche Tohmatsu

DELOITTE TOUCHE TOHMATSU

Stephen Tarling

Stephen Tarling

Partner

Brisbane, April 2015

2 Activated conditions

All conditions applicable to the scope of this audit were activated with the exception of the following:

Condition	Audit Report Reference	Condition description
9	Appendix 1 item 9.3	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 may be undertaken only if such activities will have no adverse impact on MNES, and only if the proponent has notified the Department in writing before an activity is undertaken.
10	Appendix 1 item 10.2	Routine review of species and ecological community management plans must take into account any new information available to the proponent, including any information and advice provided by Commonwealth or Queensland Government agencies, or available from other CSG proponents.
11	Appendix 1 item 11.1	The Minister may require through a request in writing the periodic review of the species and ecological community management plans, either by the Department; or alternatively by an independent qualified ecologist, or other experts, approved by the Department.
12	Appendix 1 item 12.1	Independent review of species and ecological community management plans will be at the financial expense of the proponent.
12	Appendix 1 item 12.2	Once independently reviewed, species and ecological community management plans must be submitted for written approval by the Department.
12	Appendix 1 item 12.3	Once independently reviewed and approved by the Department, species and ecological community management plans must be implemented.
22	Appendix 1 item 22.1	Review of the Protocol must take into account all relevant studies, policies, standards, guidelines and advice relating to CSG activity published or provided to the proponent by the Commonwealth or Queensland governments, or published or provided by other proponents undertaking similar activities, or published or provided by other parties, including any findings of an audit against conditions, or plans or other documentation required under the conditions of this approval.
23	Appendix 1 item 23.1	The Department may require through a request in writing that the Protocol and related plans be revised or amended before approval.
23	Appendix 1 item 23.2	The Department may require through a request in writing that the Protocol and related plans be revised or amended before approval. Any such request must be acted on within the time frame specified.

3 Summary of Non-Compliances and Associated Recommendations

A summary of our compliance findings is summarised in the table below.

Finding category	Number
Compliance	100
Non-compliance	6
Not applicable	9
Undetermined	5
Observation	2
Total assessed conditions including sub elements	122

In addition to these findings, the degree of implementation of the Significant Species Management Plan (SSMP) and Protocol was assessed in accordance with Conditions 9 and 20 respectively. Our findings are summarised in the table below.

Implemented	SSMP	Protocol
Yes	59	75
No	7	9
Not applicable	8	4
Undetermined	6	15
Observation	0	1
Total assessed elements	80	104

Recommendations to address non-compliances made in the Audit Criteria & Methodology are shown in the table below.

Condition ref	Non-compliance	Recommendation	Proponent Response
<p>5.4 d.iii 5.4 d.iv.</p>	<p>Non-linear infrastructure such as field compressor stations and central processing plants should be excluded from the no impact zone. This is a buffer zone 300m from the perimeter of Zone 4a areas. Where this infrastructure is justified given other constraints and cannot be avoided, it should only be located in this zone where field ecological surveys demonstrate that there will be minimal, short term and recoverable, or no adverse impact on any MNES, including habitat for any listed species.</p> <p>We observed non-linear infrastructure located in the no impact zone. Justification for locating the infrastructure in these areas is provided in the Records of Impacts documents. However, project documentation did not sufficiently demonstrate that there would be minimal adverse impact on any MNES, including habitat for any listed species.</p>	<p>Consider providing a commentary in the Agreement of Final Layout Request (AFLR) document relating to the suitability of the infrastructure location given potential adverse impacts on any MNES found, including habitat for any listed species. This should include whether there will be minimal, short term and recoverable, or no adverse impact on any MNES.</p>	<p>When non-linear infrastructure is located within a No Impact Zone QGC ensures that any impacts will be minimal, short term and recoverable, or no adverse impact on any MNES by:</p> <ul style="list-style-type: none"> - having a suitably qualified ecologist approved by the Department of the Environment attend the pegging party which addresses infrastructure placement; - carrying out prestart meetings with all contractors to identify environmental constraints to be managed; - where possible ensuring that any infrastructure placed in the no-impact zone is located in cleared grazing agricultural land that has already been managed by the landholder; - implementing measures to avoid impact to MNES such as barricading or flagging sensitive areas; - management of clearing activities such as not allowing vegetation to be pushed into areas of MNES; and - weed management practices to avoid the spread of weeds. <p>It should be noted that the No Impact Zone is a buffer around MNES and does not in itself contain MNES. If the placement of infrastructure within this buffer zone were to impact on MNES, QGC would not be permitted to conduct activities in those areas for other non-linear infrastructure.</p> <p>QGC has recently updated its internal documentation to allow for additional commentary specific to Zone 4a buffers zones for linear and non-linear activities to be included.</p>

Condition ref	Non-compliance	Recommendation	Proponent Response
5.5 e.ii.l.	<p>All linear disturbance within Zone 4a and the impact risk zone must be limited to 30 m in width where there are one or two gas and water trunklines, underground 33kV power lines and fibre optic cables in parallel.</p> <p>One instance was found where the disturbance corridor exceeded this allowable width.</p>	<p>Consider providing refresher training to the functional managers and Area Asset Managers regarding the disturbance corridor requirements stipulated in the Protocol.</p>	<p>The petroleum pipeline licence (PPL) issued by the Department of Environment and Heritage Protection (DEHP) specifically for the Polaris Trunkline authorised QGC to clear to 32m. QGC did not ensure that the requirements of the DEHP approval were in line with the EPBC approval on this occasion.</p> <p>QGC will review its internal procedures to minimise the risk of a recurrence.</p>
5.7 g.iii.	<p>Site assessments and field ecological surveys should be undertaken by a suitably qualified ecologist approved by the Department.</p> <p>Instances were found where evidence of approval of ecologists could not be provided.</p>	<p>Consider reviewing the ecologist supplier list and determine if documentation is retained to evidence that each ecologist is suitably qualified and approved by the Department. The proponent should subsequently consult the Department at the earliest opportunity to address any gaps in documentation.</p>	<p>QGC acknowledges this is an isolated administrative error.</p> <p>QGC will review its internal procedures to minimise the risk of a recurrence.</p>
5.7 g.iv	<p>Site assessments and field ecological surveys should document the survey methodology, results and significant findings in relation to MNES.</p>	<p>Consider developing wording to describe the methodology undertaken for all site assessments and field ecological surveys aligned with the Proponent's Environmental Field Constraints Guideline, and insert wording into associated survey template documents.</p>	<p>QGC documents its survey methodology in the Environmental Field Constraints Guideline, Rev 0, July 2012. This guideline reflects best practice and references the following guidelines:</p> <ul style="list-style-type: none"> - Nature Conservation (Wildlife Management) Regulation 2006 - Protected Plants Assessment Guidelines - DoE survey guidelines - National Guidelines for Vegetation assessment <p>Best practice in survey methodology is also achieved through:</p> <ol style="list-style-type: none"> 1. The use of suitably qualified ecologists approved by the DoE to undertake all survey work; 2. Documenting detailed ecological features in the field surveys; and 3. Implementation of QGC's survey guidelines by the qualified ecologists.

Condition ref	Non-compliance	Recommendation	Proponent Response
			<p>QGC has not included this information within each pre-clearance survey ensure the survey documentation is concise and relevant to the site. To include the methodology in each pre clearance document would not improve implementation of the methodology.</p> <p>Although this may be considered a technical non-compliance, QGC meets the intent of this condition.</p>
26.1	<p>Within 6 months of the commencement of gas field development activities, the Proponent must prepare an Offset Plan. Commencement of gas field development occurred on 22 October 2011. An Offsets Plan dated May 2014 was sent to the Department for approval and is currently awaiting endorsement.</p>	<p>The Proponent is continuing to engage with the Department to approve the Offset Plan at the earliest opportunity. No further action is recommended.</p>	<p>QGC is working with the Department to remedy this non-compliance.</p>

4 Improvement opportunities

Opportunities to improve the Proponent's systems and processes were noted during the course of the audit. These primarily relate to instances where elements of the Significant Species Management Plan (SSMP) and the Protocol were not implemented per Conditions 9 and 20 respectively.

Scope ref	Finding / Observation	Improvement opportunity	Proponent Response
AC&M 5.7 g.iii.	Observation: It is understood that Unidel are a regular supplier to the Proponent in undertaking preclearance surveys, site assessment and field ecological surveys. The experience and qualifications of ecologists from Unidel were not always disclosed as required by the approval granted by the DSEWPC, dated 21 April 2011.	When engaging Unidel to undertake site assessments and field ecological surveys, consider specifying in the tender / contractor documentation the requirement to document the ecologists' experience and qualifications in the survey report.	Unidel no longer conducts ecological surveys for QGC. QGC now maintains a central register of the qualifications of contractors that conduct field ecological surveys in accordance with the Departments approval. This ensures that the ecological survey reports are concise and only contains relevant information.
AC&M 5.7 g.v.	Finding: Site assessments and field ecological surveys should apply best practice site assessment and ecological survey methods appropriate for each listed threatened species, migratory species, their habitat and listed ecological communities. Whilst surveys are conducted in accordance with best practice there is inconsistency in how site assessments are presented, varying from template pro formas to informal notes.	Consider developing a pro forma for site assessments or surveys that do not currently have a pro forma. This should be aligned with EPBC permit requirements and should include but is not limited to, document control, background such as people present, date, location; methodology adopted and applicable standards or guidelines followed. The report structure of other site assessments such as Quantification Reports should be aligned with these requirements.	This finding relates to an opportunity to improve documentation; however, the use of suitably qualified ecologists approved by the department ensures that best practice is applied. QGC will continue to review and update its documentation as required and will consider this finding in the next scheduled review.
AC&M 7.3	Observation: The management plans should address as a minimum, the ecological communities and species and their habitat described in Condition 7. Whilst the SSMP addresses <i>Philotheca sporadica</i> and <i>Egernia rugosa</i> (Yakka Skink), Species Management Plan (SMP) number 32 in the SSMP does not include the 10 ha disturbance limit for <i>Philotheca sporadica</i> . In addition, SMP plan number 43 does not include the 343 ha disturbance limit for Yakka Skink.	As part of the current review process of the SSMP (ongoing as of 1 December 2014), <i>Philotheca sporadica</i> and Yakka Skink SMPs should be updated to include the disturbance limits specified in the Condition.	QGC notes that this is not a specific approval requirement. QGC will consider updating the <i>Philotheca sporadica</i> and Yakka skink SMPs to include the disturbance limits specified in the condition.

Scope ref	Finding / Observation	Improvement opportunity	Proponent Response
Protocol 2.1B	Finding: The Protocol and related plans should be reviewed and updated at least annually. A conflicting requirement was noted give that 'related plans' such as SSMP and Remediation, Rehabilitation, Recovery and Monitoring Plan (RRRMP) themselves state that they will be updated every 5 years. However, the Protocol has not been reviewed and updated at least annually.	Consider updating wording in the Protocol to align the review requirement of 'related plan' to the 5 year review requirement of the SSMP and RRRMP.	QGC agrees with this finding and notes that the non-compliance results from an inconsistency between plans. The requirement is an administrative one and no environmental harm has been caused. QGC will consider an amendment to the protocol to be consistent with the requirements within the approved SSMP and RRRMP.
Protocol 3.1A Protocol 4.0A.vii Protocol 4.0B xiii	Finding: Project documentation including the Project Access and Clearance Request (PACR), Agreement of Final Layout Request (AFLR) and Access To Work (ATW) must be approved by the relevant managers of the following business groups: Environment and Licensing, Land Access and Social Performance, Commercial, Tenures, Health, Safety and Security (HSS) and Cultural Heritage. Approvals from Health & Safety stakeholders were missing from each type of project documentation. However, it is noted that HSS involvement is not relevant at the PACR conceptual design phase. Instances were also noted where PACRs did not include approvals by some stakeholders.	Consider reviewing the existing process to obtain sign off of PACR, AFLR and ATW documents to improve the completeness of approvals from stakeholders required by the Protocol. Consider updating the Protocol to remove the requirement to obtain HSS approval at PACR stage.	QGC notes that these approvals are an internal requirement and the permit does not require the protocol to include these elements. In some instances it is necessary for a site approvals supervisor to approve documentation covering construction, drilling and engineering and safety aspects rather than individual discipline supervisors. However, the inclusion of this requirement in internal documentation ensures that aspects relating to all relevant disciplines are considered as part of the internal approval process.
Protocol 3.2.1B.iii Protocol 3.2.1B.iv	Finding: The information contained in the PACR should include environmental and social constraints maps and a construction schedule for the infrastructure. Instances were found where this information was not included in the PACR.	Consider adopting a consistent approach in developing PACR documents for each development. This should include environmental and constraint maps and construction schedules in every case.	QGC regularly reviews and updates its internal documentation to ensure it is fit for purpose. QGC notes that construction schedules and constraints maps are easily accessible to relevant personnel when required.
Protocol 3.2.4A	Finding: The Protocol requires a series of groups to attend the pegging parties, including the Site Survey and Clearance Coordinator, Land Access, Construction, Engineering, Survey, Environment, including specialist ecologists), Cultural Heritage	Consider updating the preclearance survey template pro forma to include the functional groups required by the Protocol. Given the range of infrastructure under development, it is	QGC notes that these are internal, QGC requirements. The approval does not require the protocol to include these elements. The preclearance survey is only the ecological component of the pegging party. Other

Scope ref	Finding / Observation	Improvement opportunity	Proponent Response
	(incl. Archaeologist where necessary), Safety, Drilling and Subsurface. Instances were noted where all required groups were not documented as having attended the pegging party.	understood that attendance by all functional groups may not be relevant for some developments. For example, Drilling is unlikely to be required for a proposed gathering line development. In such cases, the Proponent should document this.	functional groups are required to complete their own group specific pro formas for submission to the Asset. QGC will consider this finding during future reviews of its internal documentation. QGC considers that existing processes ensure that all relevant disciplines are engaged during the approval process.
Protocol 5.2.1A	Observation: it was recommended in the Environmental Impact Statement that all non-linear CSG infrastructure be excluded from Zone 4a. We observed that whilst non-linear infrastructure is included in Zone 4a in multiple instances, location of infrastructure in this zone is sometimes necessary since other local constraints inhibit an alternative location. In such circumstances the Proponent follows a due diligence process - the Upstream Development Process (UDP) - to manage this risk.	No improvement opportunity noted.	NA
SSMP 1.7A	<p>Finding: An Annual Report should be prepared by QGC and submitted to DSEWPaC and DERM that includes:</p> <ul style="list-style-type: none"> • A summary of pre-clearance surveys and associated findings; • A summary of actual impacts to TECs and EVNT flora and fauna species and relevant approved disturbance limits; • Approved disturbance areas remaining; • Offsets in place for those TECs and EVNT flora and fauna species; • A summary of rehabilitation in relation to those TECs and EVNT flora and fauna species; and • Any additional offsets that may need to be provided 	Consider developing a process to prepare an Annual Report to include the requirements of the SSMP and submit the Annual Report to the Department and DERM.	QGC is currently preparing a consolidated report for the 2011 to 2014 period. QGC will submit this report to the Department of the Environment upon completion. In future, QGC will produce and submit annual reports to the Department of the Environment in accordance with this SSMP requirement.

Scope ref	Finding / Observation	Improvement opportunity	Proponent Response
	<p>should the limits be close to being exceeded.</p> <p>The Annual Report has not been developed and submitted to DSEWPaC and DERM.</p>		
SSMP 1.8D	<p>Finding: Whilst the contractor Environmental Management Plans (EMP) are developed based on the site Access To Work document which incorporates guidelines from the SSMP, guidelines from the SSMP are not incorporated into relevant QCLNG contractor specifications.</p> <p>Whilst it is recognised that the Gas Field Services Contract should remain a high level document, it does not incorporate SSMP guidelines.</p>	<p>Recognising that the Gas Field Services Contract should remain a high level document, the Proponent should consider including a requirement for 'the Contractor to develop HSSE documentation that incorporates guidelines detailed in Company management plans as required', or similar.</p>	<p>The outcomes of the constraints planning process, including relevant requirements from the SSMP, are documented in the ATW issued to contractors.</p> <p>QGC considers the ATW to be a contractor specification document as it is the primary document used to notify contractors of the site specific conditions attached to each scope of work. None the less, all new contracts issued include reference to the SSMP.</p>
SSMP 5.1.3D SSMP 5.1.3M	<p>Finding: For those TECs, specific fauna and EVNT flora species that are confirmed during pre-clearance surveys and unavoidable impacts will be required to these areas, the SMP will be updated with site specific details to ensure that it satisfies Condition 8 and 10 of the EPBC Approval 2008/4398. The SMP should be submitted to DSEWPaC for noting. SMPs have not been updated since the initial approval by the DoE dated 20 October 2011.</p>	<p>As part of the current review process of the SSMP (ongoing as of 1 December 2014), SMPs should be updated to include site specific details obtained from surveys. In order to comply with Condition 8 and 10 of the Approval, this should include the location of the species in proximity to infrastructure, the extent of impact, and site specific mitigation measures.</p>	<p>QGC keeps detailed records of flora, fauna and community occurrences in various data management systems. All new information collected will be included in the next formal review of the SMPs to be submitted to the Department.</p> <p>QGC notes that Condition 8 relates to initial development of the SMPs rather than reviews of the plans and does not specifically require site specific information gathered as a result of surveys.</p>
SSMP 5.1.3Q	<p>Finding: In relation to Commonwealth listed TECs and flora, clearing should be undertaken of the area once the SMP is submitted and approved by DSEWPaC. We noted that a Koala was observed on 18 October 2014 which does not have an associated SMP. Whilst the Proponent implemented reasonable mitigation actions following the sighting of the Koala, clearing works were completed before the SMP was submitted and approved by the DoE.</p>	<p>Consider engaging relevant personnel to raise awareness of the SSMP requirement to only undertake clearing of an area once the relevant SMP is submitted and approved by the Department. This is relevant to any new SMPs developed as a result of new MNES found. Site inspections should be coordinated to determine if</p>	<p>QGC notes that whilst it is a requirement to obtain approval of any new SMP the conditions do not require approval prior to activities. The measures implemented by QGC following the sighting of the Koala were considered to have effectively minimised the risk to the MNES.</p> <p>These measures included:</p> <ul style="list-style-type: none"> - stopping works;

Scope ref	Finding / Observation	Improvement opportunity	Proponent Response
		this requirement has been met.	<ul style="list-style-type: none"> - setting up a 100m exclusion zone; - inspection of the right of way by a fauna spotter; and - reduction of speed limits within the area;
SSMP 5.6.5B	Finding: In relation to the monitoring of translocation and / or propagated transplant sites of P.Sporadica, we found that the Proponent did not conduct monitoring in accordance with planned specified intervals.	The Proponent should implement a monitoring regime in accordance with planned monitoring intervals in any future translocation and / or propagation projects. This could be achieved by assigning responsibilities to appropriate parties at the outset of the translocation / propagation project and subsequently inspecting monitoring records accordingly.	<p>The audit finding has been updated to reflect that monitoring of the plants occurred fortnightly for the first month following translocation.</p> <p>Monitoring then occurred in late November 2013 and June 2014 which is outside the quarterly required. No further monitoring was conducted as the survival rate was at 4% and the trial was discontinued.</p> <p>While this may constitute a technical non-compliance, it has had no impact on environmental outcomes.</p>

Appendix 1: Audit Criteria & Methodology

This document presents the work conducted and findings of the independent auditor in respect of compliance with conditions of the Environment Protection and Biodiversity Conservation (EPBC) Upstream Approval (EPBC 2008/4398) in relation to the Queensland Curtis LNG (QCLNG) Project

Date of report: 29 April 2015 (final)
Report prepared by: Deloitte Touche Tohmatsu

Third Party Audit
Queensland Gas Company Ltd / BG International Limited
EPBC Approval 2008/4398

Terminology:
Compliance 'Y' Compliance is given when the auditee has complied with a condition or element of a condition
Non-compliance 'N' Non-compliance is given when the auditee has not met a condition or element of a condition
Not applicable 'NA' A not applicable rating of NA is given when the condition or element of a condition falls outside the scope of the audit eg. if an activity has not yet commenced
Undetermined 'U' Undetermined is given when the condition or element of a condition falls inside the scope of the audit but there is insufficient evidence to make a judgement on compliance or non-compliance
Observation 'O' An observation may be made about issues relevant to the protection of a matter of national environmental significant (MNES) when the issue is not strictly related to compliance or non-compliance with a condition or element of a condition

Constraints Planning and Field Development Protocol					
EPBC 2008/4398	Before the commencement of gas field development, the proponent must develop a Constraints Planning and Field Development Protocol (the Protocol).				
Condition Number 3					
Criterion 1	Development of the constraints planning and field development protocol.				
Indicator	Independent auditor Comments	Measurements made	Requirement	Verification Method	Compliance finding
3.1 A Constraints Planning and Field Development Protocol must be developed.	We obtained the finalised original version of the Protocol (Rev 3, dated 19/10/2011). Finalised version reflects revisions made in response to comments received from DSEWPAC.	Protocol	Check that a Constraints Planning and Field Development Protocol has been developed.	Sight the original version of the Protocol relevant to the activity.	Y
Criterion 2	The Protocol developed before the commencement of gas field development.				
3.2 The Protocol must be developed before the commencement of gas field development.	Commencement of action in the gas fields was 22 October 2011. This date was also the commencement of QGC's first major stage of gas field development. Review of the written approval of the Protocol confirms that it was granted on 21 October 2011. Therefore, the commencement of the first (and only relevant) stage of the gas field development took place post receipt of written approval.	Protocol; DSEWPac's Approval of the QCLNG Gasfields - Constraints Planning and Field Development Protocol	Check that the Protocol was developed before the commencement of gas field development	1. Identify the preparation date of the original version of the Protocol 2. Review evidence to determine the commencement date of onsite works for gas field development. 3. Compare the date of when the Protocol was prepared to the commencement date of gas field development.	Y
EPBC 2008/4398	The Protocol must apply for the life of the project and include the principles of:				
Condition Number 4	a. avoiding direct and indirect adverse impacts on MNES; b. mitigating and managing direct and indirect impacts to minimise cumulative adverse impacts on MNES; c. active site remediation and rehabilitation of impacted areas to promote and maintain long-term recovery of MNES.				
Criterion 1	Protocol to apply for the life of the project.				
4.1 The Protocol must apply for the life of the project.	Review of the Protocol confirms that it applies for the life of the project. Refer to Section 2.1. Protocol also notes that Protocol and related plans are to be reviewed and updated at least on an annual basis, before each major stage of gas field development, or following a written request from the DSEWPAC. Discussions with a Proponent representative determined that the Protocol, Rev 3, 2011 remains in use, pending revision and approval. The new version of the Protocol is currently undergoing final internal approval. The review of the Protocol will inform planning for Phase 2 of the Project. The review has been triggered as a result of the commencement of commissioning of the LNG plant on Curtis Island that marks the conclusion of Phase 1. The Protocol is issued to engineers and field operations, management teams, Environment team and tenure team.	Protocol; discussions with a Proponent representative	Check that the Protocol applies for the life of the project.	1. Review the Protocol to determine if it makes reference to applying for the life of the project. 2. Hold discussions with key stakeholders to determine if the Protocol remains in use and that relevant stakeholders have knowledge of the Protocol being in place for the life of the project.	Y
Criterion 2	Protocol must include principles of: a. avoiding direct and indirect adverse impacts on MNES; b. mitigating and managing direct and indirect impacts to minimise cumulative adverse impacts on MNES; c. active site remediation and rehabilitation of impacted areas to promote and maintain long-term recovery of MNES.				
4.2 The Protocol must include principles of:					
4.2 a. avoiding direct and indirect adverse impacts on MNES;	Review of the Protocol confirmed inclusion of the principle of avoiding direct and indirect adverse impacts on MNES. Refer to Section 2.1(1).	Protocol	Check that the Protocol includes principle (a)	Review the Protocol to determine if it includes measure (a)	Y

4.2 b. mitigating and managing direct and indirect impacts to minimise cumulative adverse impacts on MNES;	Review of the Protocol confirmed inclusion of the principle of mitigating and managing direct and indirect impacts to minimise cumulative adverse impacts on MNES. Refer to Section 2.1(2).	Protocol	Check that the Protocol includes principle (b)	Review the Protocol to determine if it includes measure (b)	Y
4.2 c. active site remediation and rehabilitation of impacted areas to promote and maintain long-term recovery of MNES.	Review of the Protocol confirmed inclusion of the principle of active site remediation and rehabilitation of impacted areas to promote and maintain long-term recovery of MNES. Refer to Section 2.1(3).	Protocol	Check that the Protocol includes principle (c)	Review the Protocol to determine if it includes measure (c)	Y
EPBC 2008/4398 Condition 5	<p>The Protocol must:</p> <p>a. classify the following as being within the proponent's highest environmental constraint class - Zone 4a (or should the proponent's classification be revised, an equivalent high environmental constraints class):</p> <p>i. all listed threatened ecological communities;</p> <p>iii. either:</p> <p>g. ensure site assessments and field ecological surveys:</p> <p>i. are undertaken in accordance with the Department's survey guidelines in effect at the time of the survey. This information can be obtained from http://www.environment.gov.au/epbc/guidelinespolicies.html#lthreatened;</p> <p>ii. take into account and reference previous ecological surveys undertaken in the area and relevant new information on likely presence or absence of MNES;</p> <p>iii. are undertaken by a suitably qualified ecologist approved by the Department;</p> <p>iv. document the survey methodology, results and significant findings in relation to MNES.</p> <p>v. apply best practice site assessment and ecological survey methods appropriate for each listed threatened species, migratory species, their habitat and listed ecological communities;</p> <p>Note: Best practice includes applying the optimum timing and frequency of site assessments and surveys to determine presence or absence of listed threatened species or migratory species or their habitat, or a listed threatened ecological community.</p> <p>vi. apply the mapping of environmental constraints class Zone 4a; the infrastructure requirements; minimum no impact zones; impact risk zones; and the width requirements for linear infrastructure corridors described in e);</p> <p>vii. reports are published by the proponent on the internet 20 business days before clearance of native vegetation in an infrastructure impact area and provided to the Department on request;</p> <p>h. require species and ecological community management plans which include:</p> <p>i. relevant avoidance and mitigation measures to be applied;</p> <p>ii. measures for protecting each listed threatened species and migratory species and their habitat, and each listed threatened ecological community not previously assessed by the proponent, should one or more be found in the project area at any time over the life of the project. Any such management plans must be developed in a timeframe to be approved by the Department. Notification of additional MNES found must be provided to the Department in writing within 10 business days. Measures must include the development of a management plan consistent with requirements under condition 8; and</p> <p>i. ensure constraints planning and field development decisions are made in accordance with the Protocol (including any relevant species and ecological community management plans) before final selection of specific sites for gas field development within the project area.</p>				
Criterion 1	<p>The Protocol must:</p> <p>a. classify the following as being within the proponent's highest environmental constraint class - Zone 4a (or should the proponent's classification be revised, an equivalent high environmental constraints class):</p> <p>i. all listed threatened ecological communities;</p> <p>ii. all listed flora species; and</p> <p>iii. those listed threatened and migratory fauna species habitats as identified in management plans required under these conditions, which where relevant may be described in terms of specific niche habitat types;</p> <p>Note: The proponent's approach to environmental constraint class Zone 4a and related impact avoidance and mitigation is described in volume 3, chapter 7 (7.6.2.4) of the proponent's Environmental Impact Statement (dated July 2009). The protocol conditions do not apply to the other constraints that the proponent has included in environmental constraint class - Zone 4a unless these are relevant to MNES.</p>				
5.1 The Protocol must: a. classify the following as being within the proponent's highest environmental constraint class - Zone 4a (or should the proponent's classification be revised, an equivalent high environmental constraints class):					
5.1 a.i. all listed threatened ecological communities;	<p>Review of the Protocol confirmed that all EPBC Act listed threatened ecological communities have been included in the Proponent's highest environmental constraint class - Zone 4a. Refer to Section 5.4.1 Table 1 and Appendix A.</p> <p>We obtained a walkthrough of the GIS system and observed Zone4a maps overlaid with the listed threatened ecological communities. All areas of listed TECs matched the Zone4a maps.</p>	Protocol; walkthrough of GIS System; Zone 4a Constraint Maps	Check that the Protocol classifies item (i) as the highest environmental constraint class - Zone 4a.	<p>1. Review the Protocol to determine if the highest constraints class is assigned to (i).</p> <p>2. Review constraints mapping to determine if the highest constraints class is assigned to (i).</p>	Y
5.1 a.ii. all listed flora species;	<p>Review of the Protocol confirmed that all EPBC Act listed flora species have been included in the Proponent's highest environmental constraint class - Zone 4a. Refer to Section 5.4.1 Table 1 and Appendix A.</p> <p>We obtained a walkthrough of the GIS system and observed Zone4a maps overlaid with the listed flora species. All areas of listed flora species matched the Zone4a maps.</p>	Protocol; walkthrough of GIS System; Zone 4a Constraint Maps	Check that the Protocol classifies item (ii) as the highest environmental constraint class - Zone 4a.	<p>1. Review the Protocol to determine if the highest constraints class is assigned to (ii).</p> <p>2. Review constraints mapping to determine if the highest constraints class is assigned to (ii).</p>	Y

<p>5.1 a.iii. those listed threatened and migratory fauna species habitats as identified in management plans required under these conditions, which where relevant may be described in terms of specific niche habitat types;</p>	<p>Review of the Protocol confirmed that all those listed threatened and migratory fauna species habitats as identified in management plans, which where relevant may be described in terms of specific niche habitat types, have been included in the Proponent's highest environmental constraint class - Zone 4a. Refer to Section 5.4.1 Table 1 and Appendix A.</p> <p>The only exception to this are the following TECs which, based on discussions with a Proponent representative are understood not to occur in the project area:</p> <ol style="list-style-type: none"> 1. The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin 2. Natural Grasslands of the Queensland Central Highlands and the northern Fitzroy Basin 3. Coolibah-Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South bioregions ecological community <p>We obtained a walkthrough of the GIS system and observed Zone 4a maps overlaid with listed threatened and migratory fauna species habitats. All areas of listed threatened fauna species matched the Zone4a maps.</p>	<p>Protocol; walkthrough of GIS System; Zone 4a Constraint Maps</p>	<p>Check that the Protocol classifies item (iii) as the highest environmental constraint class - Zone 4a.</p>	<ol style="list-style-type: none"> 1. Review the Protocol to determine if the highest constraints class is assigned to (iii). 2. Review constraints mapping to determine if the highest constraints class is assigned to (iii). 	<p>Y</p>
<p>Criterion 2</p>	<p>The Protocol must: b. take into account all current survey data and available information and maps of all MNES relevant to the project area as described within environmental constraint class Zone 4a;</p>				
<p>5.2 b. The Protocol must: take into account all current survey data and available information and maps of all MNES relevant to the project area as described within environmental constraint class Zone 4a;</p>	<p>Protocol highlights process to keep constraints mapping current involves updating the constraints information whenever additional relevant information becomes available (such as when there are changes to government databases that form the basis of constraint layers and survey data collected in the field which may indicate the presence of constraints not previously identified or in the absence of constraints identified through desktop mapping), or when QGC assigns an alternative constraints ranking to an existing constraint. As noted in the Protocol, before a constraint ranking is reassigned, QGC follow a rigorous process to ensure all relevant business groups authorise the change before the change is approved by the General Manager Environment or their delegate. Refer to Section 6.0.</p> <p>Field survey data from ecologists conducting preclearance surveys is uploaded into ArcGIS on a daily basis and reviewed before it is attributed into the GIS dataset. The survey data includes information on any MNES found. When the constraints mapping is reviewed as part of the development planning process, the field survey data supersedes the government datasets in ArcGIS since it is a more reliable ground truthed data source.</p>	<p>Protocol; walkthrough of GIS System</p>	<p>Check that the Protocol takes into account current survey data and maps of all MNES relevant to the project area as described within environmental constraint class Zone 4a.</p>	<ol style="list-style-type: none"> 1. Review the Protocol to determine if a process is in place to keep constraints mapping current. 2. Review constraints mapping to determine if they are updated to reflect current survey data and available information of all MNES relevant to the project area. 	<p>Y</p>
<p>Criterion 3</p>	<p>The Protocol must: c. require the undertaking and documentation of planning and pre-clearance site assessments and field ecological surveys in proposed gas field development areas where constraint class Zone 4a is mapped, likely, or found. The pre-clearance site assessments and field ecological surveys must identify and assess options relating to potential gas field development impacts on MNES and provide recommendations to inform the proponent's decision to develop the project area;</p>				
<p>5.3 c.i. The Protocol must: require the undertaking and documentation of planning and pre-clearance site assessments and field ecological surveys in proposed gas field development areas where constraint class Zone 4a is mapped, likely, or found.</p>	<p>Our review of the Protocol confirms that it requires a report to be generated for all constraints at each location selected for each potential infrastructure type and records to be maintained for the reasons pertaining to selection of the location where very high (Zone 4a) constraint areas are located. Constraints identified at the desktop level are required to be ground truthed through field pre-clearance surveys prior to the authorisation of the final location or route of all infrastructure, including where Zone 4a constraints have been identified.</p>	<p>Protocol</p>	<p>Check that the Protocol requires the undertaking and documentation of planning and pre-clearance site assessments and field ecological surveys in proposed gas field development areas where constraint class Zone 4a is mapped, likely, or found.</p>	<ol style="list-style-type: none"> 1. Review the protocol to determine that it requires the undertaking and documentation of planning and pre-clearance site assessments and field ecological surveys in proposed gas field development areas where constraint class Zone 4a is mapped, likely, or found. 	<p>Y</p>
<p>5.3 c.ii The pre-clearance site assessments and field ecological surveys must identify and assess options relating to potential gas field development impacts on MNES and provide recommendations to inform the proponent's decision to develop the project area;</p>	<p>The Environmental Pegging Party report is a standard template completed by ecologists. The template includes provision to describe environmental issues relating to flora and fauna surveyed including Threatened Ecological Communities, EVNT species and wetlands for example. Of the 10% of preclearance surveys sampled, 13 surveys described potential impacts to MNES found. Where MNES are found recommendations are provided to alter the location of the infrastructure / avoid the vegetation, ensure a clearing permit is obtained and / or have a fauna spotter on site during clearing.</p>	<p>10% sample of Preclearance Survey Records</p>	<p>Pre-clearance site assessments and field ecological surveys must identify and assess options relating to potential gas field development impacts on MNES and provide recommendations to inform the proponent's decision to develop the project area</p>	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of pre-clearance site assessments and field ecological surveys to determine that they: <ul style="list-style-type: none"> - identify and assess options relating to potential gas field development impacts on MNES; - provide recommendations to inform the decision to develop the project area. 	<p>Y</p>

<p>Criterion 4</p>	<p>The Protocol must:</p> <p>d. to avoid direct and indirect adverse impacts on MNES, including fragmentation and edge effects, require the proponent to determine the location of proposed infrastructure in accordance with the following:</p> <p>i. preferentially avoid native vegetation that constitutes a listed ecological community and/or may provide habitat for listed species and utilise previously cleared or previously utilised areas;</p> <p>ii. exclude exploration and production wells from within areas identified as environmental constraint class Zone 4a unless their location within environmental constraint class Zone 4a is justified as an exception given other constraints and the impact on any MNES will be minimal, short term and recoverable; and <i>disturbance to environmental constraint class Zone 4a</i> .</p> <p>iii. either:</p> <p>I. exclude other <u>non linear</u> infrastructure from the no impact zone; or</p> <p>II. where the location of other non linear infrastructure in the no impact zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be minimal, short term and recoverable, or <u>no</u> adverse impact on any MNES, including habitat for any listed species;</p> <p>iv. either:</p> <p>I. exclude <u>linear</u> infrastructure from the impact risk zone; or</p> <p>II. where the location of linear infrastructure in the impact risk zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be <u>minimal</u> adverse impact on any MNES, including habitat for any listed species.</p> <p><i>Note: Justification is reportable in accordance with condition 13 a) vii). The management plan requirements under condition 8 h) may also indicate that a species or its habitat can co-exist. with specific types of gas field infrastructure and operations.</i></p>				
<p>5.4 d. The Protocol must: to avoid direct and indirect adverse impacts on MNES, including fragmentation and edge effects, require the proponent to determine the location of proposed infrastructure in accordance with the following:</p>					
<p>5.4 d.i. preferentially avoid native vegetation that constitutes a listed ecological community and/or may provide habitat for listed species and utilise previously cleared or previously utilised areas;</p>	<p>Review of the Protocol confirms that in relation to MNES, proposed infrastructure locations are required to preferentially avoid native vegetation that constitutes a listed ecological community and/or may provide habitat for listed species and utilise previously cleared or previously utilised areas. Measures in place to locate proposed infrastructure in accordance with (i) involve the following: a. recording ecological constraints and updating as required in CROME; b. undertaking pre-clearance surveys for all proposed infrastructure.</p> <p>We sighted infrastructure mapping on GIS with TECs and listed species overlaid. Whilst examples of avoidance were evident, TEC survey data is directly correlated to proposed infrastructure since the nature of the UDP is to conduct surveys at proposed infrastructure locations. As a result, TECs and listed species naturally occur in close proximity to the infrastructure. A determination of preferential avoidance was inconclusive on this basis. However, based on site visit and our understanding of the UDP, we note that QGC adopts a policy of avoiding TECs and listed species.</p> <p>Review of the Zone 4a Non-Linear Infrastructure map provides evidence that Zone 4a areas have been avoided in the majority of cases. The Zone 4a map also demonstrates consideration of listed species, for example the Brigalow Scaly Foot and Yakka Skink, which also provides evidence that these species have been avoided in the majority of cases.</p> <p>In addition, based on sampled Preclearance Surveys, previously cleared or utilised areas have been identified and the degree of impact on MNESs have been determined.</p>	<p>Protocol; Infrastructure mapping in GIS; Zone 4a Non-Linear Infrastructure Map; Sample of Preclearance Survey Records</p>	<p>Check that the Protocol requires the proponent to determine the location of proposed infrastructure in accordance with (i).</p>	<p>1. Review the Protocol to determine if it includes measures to locate proposed infrastructure in accordance with (i). 2. Review proposed infrastructure mapping to determine if it is in accordance with (i).</p>	<p>Y</p>

<p>5.4 d.ii. exclude exploration and production wells from within areas identified as environmental constraint class Zone 4a unless their location within environmental constraint class Zone 4a is justified as an exception given other constraints and the impact on any MNES will be minimal, short term and recoverable; and</p>	<p>Review of the Protocol confirms that in relation to MNES, proposed infrastructure locations are required to exclude exploration and production wells from within areas identified as environmental constraint class Zone 4a unless their location within environmental constraint class Zone 4a is justified as an exception given other constraints and the impact on any MNES will be minimal, short term and recoverable. Measures in place to locate proposed infrastructure in accordance with (i) involve the following: a. recording ecological constraints and updating as required in CROME; b. undertaking pre-clearance surveys for all proposed infrastructure.</p> <p>We sighted infrastructure mapping on GIS with TECs and listed species overlaid. Whilst examples of avoidance were evident reviewing infrastructure, mapping in this way was inconclusive since infrastructure survey data is directly correlated to proposed infrastructure. As a result, TECs and listed species naturally occur in close proximity to the infrastructure. However, based on site visit and our understanding of the UDP, we note that QGC adopts a policy of avoiding TECs and listed species.</p> <p>Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, no information is provided to confirm that the proposed location has been agreed as an exception given other constraints, or that the impact on any MNES will be minimal, short term and recoverable. However, the Record of Impacts documents provide justifications for impacting MNES which are on an exception basis given other local constraints. Ultimately, the decision to located infrastructure in MNES is based on the selection of the less environmentally damaging option given other localised constraints (for example stream order 1 watercourses in the vicinity). Alternatively, other landholder constraints or site specific engineering constraints may preclude the infrastructure being located elsewhere.</p>	<p>Protocol; Infrastructure mapping in GIS; Sample of Preclearance Survey and ATW Records</p>	<p>Check that the Protocol requires the proponent to determine the location of proposed infrastructure in accordance with (ii).</p>	<p>1. Review the Protocol to determine if it includes measures to locate proposed infrastructure in accordance with (ii). 2. Review proposed infrastructure mapping to determine if it is in accordance with (ii).</p>	<p>Y</p>
<p><i>Note : Directional drilling and multiple drill holes from one well pad are options to avoid well site and related infrastructure disturbance to environmental constraint class Zone 4a.</i></p>					
<p>5.4 d.iii. either: I. exclude other <u>non linear</u> infrastructure from the no impact zone; or II. where the location of other non linear infrastructure in the no impact zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be minimal, short term and recoverable, or <u>no</u> adverse impact on any MNES, including habitat for any listed species;</p>	<p>Protocol includes details of the Upstream Delivery Process ('UDP') and Constraints System, both of which are in place to ensure that proposed infrastructure locations are excluded in accordance with this requirement.</p> <p>We reviewed a sample of preclearance surveys where non linear infrastructure (other than exploration and production wells) was located in the no impact zone and reviewed the justification for doing so. Well spacing, landholder constraints and avoidance of actual Zone 4a areas minimises the opportunities for well locations and sometimes wells will be located within these buffer zones. Disturbance to MNES is avoided via barricading and fencing off areas where infrastructure is within close proximity. QGC seek to utilise existing disturbed areas (e.g. pastoral land) and utilise an "avoid, minimise, mitigate" method when undergoing site selection in relation to environmental constraints.</p> <p>Review of Zone 4a mapping for non linear infrastructure demonstrated that infrastructure have been located in the no impact zone. Whilst QGC follows a due diligence process - the Upstream Delivery Process (UDP) - to manage risk to MNES neither ATWs nor Records of Impacts documents demonstrate that impacts will be minimal, short term or no impact will occur.</p> <p>Recommendation: consider providing a commentary in the Agreement of Final Layout Request (AFLR) document on the suitability of infrastructure location including an assessment of potential impacts to MNES taking account of impacts that are minimal, short term, recoverable or no adverse impact.</p>	<p>Protocol; Infrastructure mapping in GIS; Zone 4a Non-Linear Infrastructure Map; Sample of Preclearance Survey Records</p>	<p>Check that the Protocol requires the proponent to determine the location of proposed infrastructure in accordance with (iii) I or (iii) II.</p>	<p>1. Review the Protocol to determine if it includes measures to locate proposed infrastructure in accordance with (iii) I or (iii) II. 2. Review proposed infrastructure mapping to determine if it is in accordance with (iii) I or (iii) II.</p>	<p>N</p>

<p>5.4 d.iv, either: I. exclude <u>linear</u> infrastructure from the impact risk zone; or II. where the location of linear infrastructure in the impact risk zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be <u>minimal</u> adverse impact on any MNES, including habitat for any listed species.</p>	<p>Protocol includes details of the Upstream Delivery Process ('UDP') and Constraints System, both of which are in place to ensure that proposed infrastructure locations exclude linear infrastructure from the impact risk zone, or where the location of linear infrastructure in the impact risk zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be minimal adverse impact on any MNES, including habitat for any listed species.</p> <p>We reviewed a sample of preclearance surveys where linear infrastructure was located in the impact risk zone and reviewed the justification for doing so. Based on discussions with a Proponent representative QGC aim to exclude linear infrastructure from the impact risk zone; however due to the nature of linear infrastructure it is difficult to relocate and so occasionally linear infrastructure will be located within these buffer zones. Review of ATWs for linear infrastructure in the impact risk zone does not demonstrate that there will be minimal adverse impact on any MNES, including habitat for any listed species.</p> <p>Recommendation: consider providing a commentary in the Agreement of Final Layout Request (AFLR) document on the suitability of infrastructure location including an assessment of potential impacts to MNES taking account of impacts that are minimal, short term, recoverable or no adverse impact.</p>	<p>Protocol; Infrastructure mapping in GIS; Sample of Preclearance Survey and ATW Records</p>	<p>Check that the Protocol requires the proponent to determine the location of proposed infrastructure in accordance with (iv) I or (iv) II.</p>	<p>1. Review the Protocol to determine if it includes measures to locate proposed infrastructure in accordance with (iv) I or (iv) II. 2. Review proposed infrastructure mapping to determine if it is in accordance with (iv) I or (iv) II.</p>	<p>N</p>
<p><i>Note: Justification is reportable in accordance with condition 13 a) vii). The management plan requirements under condition 8 h) may also indicate that a species or its habitat can co-exist. with specific types of gas field infrastructure and operations.</i></p>					
<p>Criterion 5</p>	<p>The Protocol must: e. require the proponent to plan for and decide the extent that proposed linear infrastructure may have adverse impacts on MNES in accordance with the following: i. all linear disturbance within environmental constraints class Zone 4a for MNES and the impact risk zone must be: I. limited to 6 metres in width for single lane track; II. limited to 15 metres if there are one or two parallel gas or water gathering lines; III. limited to 20 meters if there are three four, or five parallel gas or water gathering lines; IV. limited to 25 meters if there are six, seven or eight parallel gas or water gathering lines; V. limited to 30 meters if there are greater than eight parallel gas or water gathering lines. ii. gas and water trunkline rights of way, water distribution pipeline rights of way, the Upstream Infrastructure Corridor (UIC), and other major linear infrastructure disturbance corridors within environmental constraints class Zone 4a and the impact risk zone must be: I. limited to 30 m in width where there are one or two gas and water trunklines, underground 33kV power lines and fibre optic cables in parallel; II. limited to 30 metres plus an additional 4 metres for every additional gas or water trunkline in parallel with the initial one or two gas or water trunklines, underground 33kV power lines and fibre optic cable; III. limited to disturbance in the corridor described for the UIC. iii. where feasible, gas trunklines, pipelines for associated water and other transmission lines must be co-located to reduce total disturbance on MNES. <i>Note: Any area of a disturbance referred to in this condition would be subtracted from the disturbance limits specified elsewhere in these conditions.</i></p>				
<p>5.5 e. The Protocol must: require the proponent to plan for and decide the extent that proposed linear infrastructure may have adverse impacts on MNES in accordance with the following:</p>					
<p>5.5 e.i. all linear disturbance within environmental constraints class Zone 4a for MNES and the impact risk zone must be:</p>					
<p>5.5 e.i.I. limited to 6 metres in width for single lane track;</p>	<p>Protocol states that all where infrastructure is located in areas of MNES then, all linear disturbance within environmental constraints class Zone 4a for MNES and the impact risk zone will be limited to 6 meters in width for single lane track (refer to Section 7.1, p. 42).</p> <p>Based on discussions with Proponent representatives and a review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, documentation explicitly states that access tracks are limited to 6 metres in width for a single lane track. In one case documentation did not explicitly state a limitation of 6m; however, on further review of associated drawings, the track was noted to be within this limit.</p>	<p>Protocol; Sample of Preclearance Surveys and ATW Records</p>	<p>Check that the Protocol requires the planning for and decision on the extent of the impact proposed linear infrastructure may have adverse impacts on MNES in accordance with (i) I.</p>	<p>1. Review the Protocol to determine if it provides for the planning and decision making of the impact proposed linear infrastructure may have on MNES in accordance with (i) I. 2. Check documentation to verify that the extent of the impacts from proposed linear infrastructure on MNES has been planned and decided in accordance with (i) I.</p>	<p>Y</p>

<p>5.5 e.i.II. limited to 15 metres if there are one or two parallel gas or water gathering lines;</p>	<p>Protocol states that all where infrastructure is located in areas of MNES then, all linear disturbance within environmental constraints class Zone 4a for MNES and the impact risk zone will be limited to 15 meters if there are one or two parallel gas or water gathering lines (refer to Section 7.1, p. 43).</p> <p>Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, where there are one or two parallel gas or water gathering lines, the width is limited to 15m.</p>	<p>Protocol; Sample of Preclearance Surveys and ATW Records</p>	<p>Check that the Protocol requires the planning for and decision on the extent of the impact proposed linear infrastructure may have adverse impacts on MNES in accordance with (i) II.</p>	<p>1. Review the Protocol to determine if it provides for the planning and decision making of the impact proposed linear infrastructure may have on MNES in accordance with (i) II. 2. Check documentation to verify that the extent of the impacts from proposed linear infrastructure on MNES has been planned and decided in accordance with (i) II.</p>	<p>Y</p>
<p>5.5 e.i.III. limited to 20 meters if there are three four, or five parallel gas or water gathering lines;</p>	<p>Protocol states that all where infrastructure is located in areas of MNES then, all linear disturbance within environmental constraints class Zone 4a for MNES and the impact risk zone will be limited to 20 meters if there are three, four or five parallel gas or water gathering lines (refer to Section 7.1, p. 43).</p> <p>Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, no instances were noted where three, four, or five parallel gas or water gathering lines were proposed.</p>	<p>Protocol; Sample of Preclearance Surveys and ATW Records</p>	<p>Check that the Protocol requires the planning for and decision on the extent of the impact proposed linear infrastructure may have adverse impacts on MNES in accordance with (i) III.</p>	<p>1. Review the Protocol to determine if it provides for the planning and decision making of the impact proposed linear infrastructure may have on MNES in accordance with (i) III. 2. Check documentation to verify that the extent of the impacts from proposed linear infrastructure on MNES has been planned and decided in accordance with (i) III.</p>	<p>U</p>
<p>5.5 e.i.IV. limited to 25 meters if there are six, seven or eight parallel gas or water gathering lines;</p>	<p>Protocol states that all where infrastructure is located in areas of MNES then, all linear disturbance within environmental constraints class Zone 4a for MNES and the impact risk zone will be limited to 25 meters if there are six, seven or eight parallel gas or water gathering lines (refer to Section 7.1, p. 43).</p> <p>Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, no instances were noted where six, seven or eight parallel gas or water gathering lines were proposed.</p>	<p>Protocol; Sample of Preclearance Surveys and ATW Records</p>	<p>Check that the Protocol requires the planning for and decision on the extent of the impact proposed linear infrastructure may have adverse impacts on MNES in accordance with (i) IV.</p>	<p>1. Review the Protocol to determine if it provides for the planning and decision making of the impact proposed linear infrastructure may have on MNES in accordance with (i) IV. 2. Check documentation to verify that the extent of the impacts from proposed linear infrastructure on MNES has been planned and decided in accordance with (i) IV.</p>	<p>U</p>
<p>5.5 e.i.V. Limited to 30 meters if there are greater than eight parallel gas or water gathering lines.</p>	<p>Protocol states that all where infrastructure is located in areas of MNES then, all linear disturbance within environmental constraints class Zone 4a for MNES and the impact risk zone will be limited to 30 meters if there are greater than eight parallel gas or water gathering lines (refer to Section 7.1, p. 43).</p> <p>Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, no instances were noted where than eight parallel gas or water gathering lines were proposed.</p>	<p>Protocol; Sample of Preclearance Surveys and ATW Records</p>	<p>Check that the Protocol requires the planning for and decision on the extent of the impact proposed linear infrastructure may have adverse impacts on MNES in accordance with (i) V.</p>	<p>1. Review the Protocol to determine if it provides for the planning and decision making of the impact proposed linear infrastructure may have on MNES in accordance with (i) V. 2. Check documentation to verify that the extent of the impacts from proposed linear infrastructure on MNES has been planned and decided in accordance with (i) V.</p>	<p>U</p>
<p>5.5 e.ii. gas and water trunkline rights of way, water distribution pipeline rights of way, the Upstream Infrastructure Corridor (UIC), and other major linear infrastructure disturbance corridors within environmental constraints class Zone 4a and the impact risk zone must be:</p>					
<p>5.5 e.ii.I. limited to 30 m in width where there are one or two gas and water trunklines, underground 33kV power lines and fibre optic cables in parallel;</p>	<p>Protocol states that gas and water trunkline rights of way, water distribution pipeline rights of way, the Upstream Infrastructure Corridor (UIC), and other major linear infrastructure disturbance corridors within environmental constraints class Zone 4a and the impact risk zone must be limited to 30 m in width where there are one or two gas and water trunklines, underground 33kV power lines and fibre optic cables in parallel (refer to Section 7.1(ii)(i), p. 43).</p> <p>Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, the PSLM document within the ATW for the Polaris FCS to Woleebee Creek CPP Gas/Water Trunklines states that the construction corridor is 32m for gas, water trunkline, FOC, power. This exceeds the 30m limit per the Condition.</p> <p>Recommendation: Consider providing refresher training to the functional managers and Area Asset Managers regarding the disturbance corridor requirements stipulated in the Protocol.</p>	<p>Protocol; Sample of Preclearance Surveys and ATW Records</p>	<p>Check that the Protocol requires the planning for and decision on the extent of the impact proposed linear infrastructure may have adverse impacts on MNES in accordance with (ii) I.</p>	<p>1. Review the Protocol to determine if it provides for the planning and decision making of the impact proposed linear infrastructure may have on MNES in accordance with (ii) I. 2. Check documentation to verify that the extent of the impacts from proposed linear infrastructure on MNES has been planned and decided in accordance with (ii) I.</p>	<p>N</p>

5.5 e.ii.II. limited to 30 metres plus an additional 4 metres for every additional gas or water trunkline in parallel with the initial one or two gas or water trunklines, underground 33kV power lines and fibre optic cable;	Protocol states that gas and water trunkline rights of way, water distribution pipeline rights of way, the Upstream Infrastructure Corridor (UIC), and other major linear infrastructure disturbance corridors within environmental constraints class Zone 4a and the impact risk zone must be limited to 30 metres plus an additional 4 metres for every additional gas or water trunkline in parallel with the initial one or two gas or water trunklines, underground 33kV power lines and fibre optic cable (refer to Section 7.1(ii)(ii), p. 43). Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, no instances were noted where more than two trunklines were proposed with underground 33kV power lines and fibre optic cable.	Protocol; Sample of Preclearance Surveys and ATW Records	Check that the Protocol requires the planning for and decision on the extent of the impact proposed linear infrastructure may have adverse impacts on MNES in accordance with (ii) II.	1. Review the Protocol to determine if it provides for the planning and decision making of the impact proposed linear infrastructure may have on MNES in accordance with (ii) II. 2. Check documentation to verify that the extent of the impacts from proposed linear infrastructure on MNES has been planned and decided in accordance with (ii) II.	U
5.5 e.ii.III. limited to disturbance in the corridor described for the UIC.	Protocol states that gas and water trunkline rights of way, water distribution pipeline rights of way, the Upstream Infrastructure Corridor (UIC), and other major linear infrastructure disturbance corridors within environmental constraints class Zone 4a and the impact risk zone must be limited to disturbance in the corridor described for the UIC (refer to Section 7.1(ii)(iii), p. 43). Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, the impact is limited to disturbance in the corridor described for the UIC.	Protocol; Sample of Preclearance Surveys and ATW Records	Check that the Protocol requires the planning for and decision on the extent of the impact proposed linear infrastructure may have adverse impacts on MNES in accordance with (ii) III.	1. Review the Protocol to determine if it provides for the planning and decision making of the impact proposed linear infrastructure may have on MNES in accordance with (ii) III. 2. Check documentation to verify that the extent of the impacts from proposed linear infrastructure on MNES has been planned and decided in accordance with (ii) III.	Y
5.5 e.iii. where feasible, gas trunklines, pipelines for associated water and other transmission lines must be co-located to reduce total disturbance on MNES.	Protocol states that where feasible, gas trunklines, pipelines for associated water and other transmission lines will be co-located to reduce total disturbance on MNES (refer to Section 7.1(iii), p. 43). Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, trunklines, pipelines and other transmission lines are frequently collocated, typically along pre-existing access routes.	Protocol; Sample of Preclearance Surveys and ATW Records	Check that the Protocol requires the planning of and decision on the extent of the impact proposed linear infrastructure may have adverse impacts on MNES in accordance with (iii).	1. Review the Protocol to determine if it provides for the planning and decision making of the impact proposed linear infrastructure may have on MNES in accordance with (iii). 2. Check documentation to verify that the extent of the impacts from proposed linear infrastructure on MNES has been planned and decided in accordance with (iii).	Y
Criterion 6	The Protocol must: f. support bioregional corridors for listed threatened species and migratory species, and connectivity for listed threatened ecological communities;				
5.6 The Protocol must: f. support bioregional corridors for listed threatened species and migratory species, and connectivity for listed threatened ecological communities.	Review of the Protocol confirms that the support of bioregional corridors for listed threatened species and migratory species, and connectivity for listed threatened ecological communities is included within the constraints mapping process. The Protocol states that QGC will identify important bioregional corridors, including those identified in the Brigalow Belt Biodiversity Planning Assessment prepared in accordance with the Biodiversity Assessment and Mapping Methodology. These corridors are in a high constraint category. Infrastructure planning and placement shall follow criteria which minimises potential impacts to these bioregional corridors including the avoidance and reduction of fragmenting large, contiguous tracks or corridors of habitat which support threatened species, habitat or communities. Where practical, infrastructure or facilities will be placed on lands already altered, cultivated, disturbed and away from areas of intact and healthy native habitats. If not practical, fragmented, degraded or regrowth habitats will be selected over relatively intact corridors. Refer to Section 2.3, p. 11.	Protocol	Check the Protocol supports bioregional corridors for listed threatened species and migratory species, and connectivity for listed threatened ecological communities	Review the Protocol to determine if it supports bioregional corridors for listed threatened species and migratory species, and connectivity for listed threatened ecological communities.	Y
Criterion 7	The Protocol must: g. ensure site assessments and field ecological surveys: i. are undertaken in accordance with the Department's survey guidelines in effect at the time of the survey. This information can be obtained from http://www.environment.gov.au/epbc/guidelines-policies.html#threatened ; ii. take into account and reference previous ecological surveys undertaken in the area and relevant new information on likely presence or absence of MNES; iii. are undertaken by a suitably qualified ecologist approved by the Department; iv. document the survey methodology, results and significant findings in relation to MNES. v. apply best practice site assessment and ecological survey methods appropriate for each listed threatened species, migratory species, their habitat and listed ecological communities; <i>Note: Best practice includes applying the optimum timing and frequency of site assessments and surveys to determine presence or absence of listed threatened species or migratory species or their habitat, or a listed threatened ecological community.</i> vi. apply the mapping of environmental constraints class Zone 4a; the infrastructure location requirements; minimum no impact zones; impact risk zones; and the width requirements for linear infrastructure corridors described in e); vii. reports are published by the proponent on the internet 20 business days before clearance of native vegetation in an infrastructure impact area and provided to the Department on request;				
5.7 g. The Protocol must: ensure site assessments and field ecological surveys:					

<p>5.7 g.i. are undertaken in accordance with the Department's survey guidelines in effect at the time of the survey. This information can be obtained from http://www.environment.gov.au/epbc/guidelines-policies.html#threatened;</p>	<p>As stated by the Protocol, site assessments and field ecological surveys will be undertaken in accordance with DSEWPaC's survey guidelines in effect at the time of the survey. Refer to Section 6.1(i), p. 39.</p> <p>Preclearance surveys are conducted in accordance with QGC's Environmental Field Constraints Guideline, Rev 2, July 2014. These guidelines require fauna surveys to be undertaken in accordance with relevant guidelines provided by the DoE. For example, survey guidelines for Australia threatened reptiles, DSEWPaC 2011. the guidelines also require flora surveys and quantifications to be undertaken in accordance with the Nature Conservation (Wildlife Management) Regulation 2006 - Protected Plants Assessment Guidelines for all impacted EPBC or NCA listed threatened flora.</p>	<p>Protocol; 10% sample of Preclearance Survey Records; Environmental Field Constraints Guideline</p>	<p>Check the Protocol requires item (i) to be addressed during site assessments and field ecological surveys.</p>	<p>1. Review the Protocol to determine that it requires (i) to be addressed during site assessments and field ecological surveys. 2. Review a representative random sample of no less than 10% of actual site assessments and field ecological surveys to determine that item (i) is addressed.</p>	<p>Y</p>
<p>5.7 g.ii. take into account and reference previous ecological surveys undertaken in the area and relevant new information on likely presence or absence of MNES;</p>	<p>As stated by the Protocol, site assessments and field ecological surveys will take into account and reference previous ecological surveys undertaken in the area and relevant new information on likely pressure or absence of MNES. Refer to Section 6.1(ii), p. 39.</p> <p>Of the 10% of preclearance surveys sampled, all surveys included relevant new information on the likely presence or absence of MNES. Preclearance Surveys sampled did not appear to take into account and reference previous ecological surveys undertaken in the area since QGC ordinarily does not resurvey sites unless the first preclearance surveys identify that the infrastructure is required to be relocated which in turn has the potential to impact MNES. Follow up preclearance surveys were reviewed and noted to reference the original preclearance survey.</p>	<p>Protocol; 10% sample of Preclearance Survey Records</p>	<p>Check the Protocol requires item (ii) to be addressed during site assessments and field ecological surveys.</p>	<p>1. Review the Protocol to determine that it requires (ii) to be addressed during site assessments and field ecological surveys. 2. Review a representative random sample of no less than 10% of actual site assessments and field ecological surveys to determine that item (ii) is addressed.</p>	<p>Y</p>
<p>5.7 g.iii. are undertaken by a suitably qualified ecologist approved by the Department;</p>	<p>As stated by the Protocol, site assessments and field ecological surveys will be undertaken by a suitably qualified ecologist approved by the DSEWPaC. Refer to Section 6.1(iii), p. 39.</p> <p>It was noted that the Proponent demonstrated a strong commitment to managing the requirement to utilise a suitably qualified ecologist which was reflected in the documentation assessed. However, of the 10% of preclearance surveys sampled evidence of approval for some ecologists who performed preclearance surveys was not provided.</p> <p>Recommendation: Consider reviewing the ecologist supplier list and determine if documentation is retained to evidence that each ecologist is suitably qualified and approved by the Department. The proponent should subsequently consult the Department at the earliest opportunity to address any gaps in documentation.</p> <p>Improvement opportunity: the experience and qualifications of ecologists from Unidel were not always disclosed as required by the approval granted by the DSEWPC. The approval includes the requirement for survey documentation and reports to include the company name, signing authority, and the qualifications and experience of all ecologists undertaking relevant work. We noted that whilst the company name (Unidel) and signing authority were included in the preclearance survey, qualifications and experience were not included.</p>	<p>Protocol; 10% sample of Preclearance Survey Records</p>	<p>Check the Protocol requires item (iii) to be addressed during site assessments and field ecological surveys.</p>	<p>1. Review the Protocol to determine that it requires (iii) to be addressed during site assessments and field ecological surveys. 2. Review a representative random sample of no less than 10% of actual site assessments and field ecological surveys to determine that item (iii) is addressed.</p>	<p>N</p>
<p>5.7 g.iv. document the survey methodology, results and significant findings in relation to MNES.</p>	<p>As stated by the Protocol, site assessments and field ecological surveys will document the survey methodology, results and significant findings in relation to MNES. Refer to Section 6.1(iv), p. 39.</p> <p>Of the 10% of preclearance surveys sampled, all surveys document results and significant findings in relation to MNES, where applicable; however, the majority of preclearance surveys do not include detail on survey methodology.</p> <p>It is understood from a Proponent representative that preclearance surveys are conducted in accordance QGC's Environmental Field Constraints Guideline, Rev 0, July 2012 developed by the QGC Environment in collaboration with the Field Environmental Officers (FEOs) and Environmental Survey Coordinators. This document is made available to the QGC business in addition to the ecologists and therefore the Proponent is of the opinion that the methodology does not require duplication in each preclearance survey. Notwithstanding this, the Proponent does not comply with the requirement of this criterion.</p>	<p>Protocol; 10% sample of Preclearance Survey Records</p>	<p>Check the Protocol requires item (iv) to be addressed during site assessments and field ecological surveys.</p>	<p>1. Review the Protocol to determine that it requires (iv) to be addressed during site assessments and field ecological surveys. 2. Review a representative random sample of no less than 10% of actual site assessments and field ecological surveys to determine that item (iv) is addressed.</p>	<p>N</p>

<p>5.7 g.v. apply best practice site assessment and ecological survey methods appropriate for each listed threatened species, migratory species, their habitat and listed ecological communities;</p>	<p>As stated by the Protocol, site assessments and field ecological surveys will apply best practice site assessment and ecological survey methods appropriate for each listed threatened species, migratory species, their habitat and listed ecological communities. Refer to Section 6.1(v), p. 39.</p> <p>The Proponent demonstrates that best practice is employed in undertaking ecological survey and site assessments by:</p> <ol style="list-style-type: none"> 1. Engaging suitably qualified ecologists approved by the Department to undertake all survey work 2. Requiring all ecologists engaged by the Proponent to follow Environmental Field Constraints Guideline which states: <ul style="list-style-type: none"> • 'Flora surveys and quantifications must be undertaken in accordance with the Nature Conservation (Wildlife Management) Regulation 2006 - Protected Plants Assessment Guidelines for all impacted EPBC or NCA listed threatened flora' (section 3.8.1) • All dedicated fauna surveys are to be undertaken in accordance with the relevant guidelines provided by the Department of Environment (DoE) e.g. Survey guidelines for Australia threatened reptiles, DSEWPaC 2011 (section 3.8.2) <p>We observed a lack of consistency with regard to documentation of site assessments such as flora surveys, habitat assessments and fauna assessments, conducted both by QGC and third parties. For example, some survey documents site the best practice guidelines adopted whereas others do not.. In addition, there is inconsistency in how site assessments are presented, varying from template pro formas to informal notes.</p> <p>Improvement opportunity: Consider developing a pro forma for site assessments or surveys that do not currently have a pro forma. This should be aligned with EPBC permit requirements and should include but is not limited to, document control, background such as people present, date, location; methodology adopted and applicable standards or guidelines followed. The report structure of other site assessments such as Quantification Reports should be aligned with these requirements.</p>	<p>Protocol; 10% sample of site assessment types, including flora surveys, habitat assessments and fauna assessments conducted by both QGC and Third Parties</p>	<p>Check the Protocol requires item (v) to be addressed during site assessments and field ecological surveys.</p>	<ol style="list-style-type: none"> 1. Review the Protocol to determine that it requires (v) to be addressed during site assessments and field ecological surveys. 2. Review a representative random sample of no less than 10% of actual site assessments and field ecological surveys to determine that item (v) is addressed. 	<p>Y</p>
<p><i>Note: Best practice includes applying the optimum timing and frequency of site assessments and surveys to determine presence or absence of listed threatened species or migratory species or their habitat, or a listed threatened ecological community.</i></p>					
<p>5.7 g.vi. apply the mapping of environmental constraints class Zone 4a; the infrastructure location requirements; minimum no impact zones; impact risk zones; and the width requirements for linear infrastructure corridors described in e);</p>	<p>As stated by the Protocol, site assessments and field ecological surveys will apply the mapping of environmental constraints class Zone 4a (very high or no go); the infrastructure location requirements; minimum no impact zones; impact risk zones; and the width requirements for linear infrastructure corridors described in Section 7. Refer to Section 6.1(vi), p. 39.</p> <p>Review of preclearance surveys evidences that Zone 4a mapping (including EPBC listed flora, fauna and communities) infrastructure location requirements minimum no impact zones; impact risk zones; and the width requirements for linear infrastructure is applied at the preclearance phase. Review of site assessments such as flora and fauna surveys and habitat assessments do not explicitly stipulate if these requirements are applied; however, these assessments are conducted as a result of a need identified in the preclearance survey and so inherently the site assessments incorporate these requirements.</p>	<p>Protocol; 10% sample of preclearance surveys and site assessments, including flora and fauna surveys and habitat assessments</p>	<p>Check the Protocol requires item (vi) to be addressed during site assessments and field ecological surveys.</p>	<ol style="list-style-type: none"> 1. Review the Protocol to determine that it requires (vi) to be addressed during site assessments and field ecological surveys. 2. Review a representative random sample of no less than 10% of actual site assessments and field ecological surveys to determine that item (vi) is addressed. 	<p>Y</p>
<p>5.7 g.vii. reports are published by the proponent on the internet 20 business days before clearance of native vegetation in an infrastructure impact area and provided to the Department on request;</p>	<p>As stated by the Protocol, site assessments and field ecological surveys will publish reports on the internet 20 business days before clearance of native vegetation in an infrastructure impact area (i.e. any area where MNES are impacted) and provided reports to DSEWPaC on request. Refer to Section 6.1(vii), p. 40.</p> <p>Site assessments and field ecological surveys do not evidence the clearance date of native vegetation. Evidence could not be provided to demonstrate that site assessments and preclearance surveys are published on the internet 20 business days before clearance of native vegetation in an infrastructure impact area. Based on discussions with stakeholders, the Department has not requested site assessments and field ecological surveys.</p>	<p>Protocol; 10% sample of preclearance surveys and site assessments</p>	<p>Check the Protocol requires item (vii) to be addressed during site assessments and field ecological surveys.</p>	<ol style="list-style-type: none"> 1. Review the Protocol to determine that it requires (vii) to be addressed during site assessments and field ecological surveys. 2. Review a representative random sample of no less than 10% of actual site assessments and field ecological surveys to determine that item (vii) is addressed. 	<p>U</p>

<p>Criterion 8</p>	<p>The Protocol must:</p> <p>h. require species and ecological community management plans which include:</p> <p>i. relevant avoidance and mitigation measures to be applied;</p> <p>ii. measures for protecting each listed threatened species and migratory species and their habitat, and each listed threatened ecological community not previously assessed by the proponent, should one or more be found in the project area at any time over the life of the project. Any such management plans must be developed in a timeframe to be approved by the Department. Notification of additional MNES found must be provided to the Department in writing within 10 business days. Measures must include the development of a management plan consistent with requirements under condition 8;</p>				
<p>5.8 h The Protocol must: require species and ecological community management plans which include:</p>					
<p>5.8 h.i. relevant avoidance and mitigation measures to be applied;</p>	<p>Protocol states that QGC has prepared species and ecological community management plans for all species and ecological communities listed as MNES. Plans describe relevant avoidance and mitigations measures. Refer to Section 7.3, p. 45.</p> <p>Review of the SSMP confirms that it includes standard avoidance and mitigation measures to be adopted across all EPBC listed TECs and EVNT flora and fauna species. This is to be achieved through the use of constraint mapping and pre-clearance surveys to identify the presence of environmental constraints and determine if there are suitable alternative locations that will avoid or minimise impacts. The pre-clearance survey report for the proposed infrastructure will be prepared by the ecologist/s that undertook the surveys and will include recommendations as to the avoidance and mitigation measures to be adopted, and whether a spotter-catcher is required to be present during clearing to ensure injury or death to fauna species is avoided and minimised.</p> <p>In addition, the SSMP also includes standard mitigation measures for TECs. Refer to Section 5.4.3. For listed Flora species, standard avoidance and mitigation strategies are included in Section 5.6.2., with specific avoidance and mitigation strategies included within individual SMPs where relevant. For listed Fauna species, specific avoidance strategies and mitigation measures are included in the individual SMPs.</p>	<p>Protocol; SSMP; Individual SMPs</p>	<p>Check the Protocol requires the development of management plans which include item (i). Check the species and ecological community management plans to ensure that they include item (i).</p>	<p>1. Review the Protocol to determine if it requires the development of management plans which include item (i). 2. Review the species and ecological community management plans to determine if they address item (i).</p>	<p>Y</p>
<p>5.8 h.ii. measures for protecting each listed threatened species and migratory species and their habitat, and each listed threatened ecological community not previously assessed by the proponent, should one or more be found in the project area at any time over the life of the project.</p>	<p>As stated in the Protocol, QGC prepared species and ecological community management plans for all species and ecological communities listed as MNES. These plans describe measures for protecting each listed threatened species and migratory species and their habitat.</p> <p>Protocol also states that Plans will be prepared in accordance with Condition 8 of the DSEWPAC approval for each listed threatened ecological community not previously assessed by QGC, should one or more be found in the project area at any time over the life of the project. Refer to Section 7.3, p. 45.</p> <p>Based on discussions with a Proponent representative, no new MNES were found during surveying that were not already included in the Species and Ecological Community Management Plans included in the SSMP with the exception of koalas. A koala was observed on 18 October 2014 during the clearing of access to Cam well #132. Koala did not have an SMP at this time. Works were stopped immediately after the Koala was sighted and a 100m exclusion zone was set up. The FSC monitored the koala throughout the rest of the day. The area was inspected the next day and it was confirmed the koala had moved away from the immediate work area. The works were then completed after a walkthrough of the Right of Way by the FSC.</p>	<p>Protocol; discussions with a Proponent representative; Koala SMP</p>	<p>Check the Protocol requires the development of management plans which include item (ii). Check the species and ecological community management plans to ensure that they include item (ii).</p>	<p>1. Review the Protocol to determine if it requires the development of management plans which include item (ii). 2. Review the species and ecological community management plans to determine if they address item (ii).</p>	<p>Y</p>
<p>5.8 h.iii. Any such management plans must be developed in a timeframe to be approved by the Department.</p>	<p>Protocol states that any such Species and Ecological Community Management Plans will be developed in a timeframe to be approved by the DSEWPAC. Refer to Section 7.3, p. 45.</p> <p>Based on discussions with a Proponent representative, no timeframe was stipulated by the Department for the development of the koala SMP.</p>	<p>Protocol; discussions with a Proponent representative</p>	<p>Check that the species and ecological community management plans were developed in a timeframe approved by the Department.</p>	<p>1. Review the species and ecological community management plans and associated submission and approval documentation to ensure that they were developed in a timeframe approved by the Department.</p>	<p>Y</p>

5.8 h.iv. Notification of additional MNES found must be provided to the Department in writing within 10 business days.	<p>Based on discussions with Proponent representatives, Koala is the only additional MNES species found during operational activities that does not have a species management plan provided in the SSMP.</p> <p>Protocol states that notification of additional MNES found will be provided to DSEWPaC in writing within 10 business days. Refer to Section 7.3, p. 45.</p> <p>The SSMP requires that the Department is notified with 10 business days of identification of new MNES as per section 4.2.</p> <p>For an assessment of whether the Department was notified in writing within 10 business days, refer to the item below.</p>	Protocol; SSMP	Check the Protocol requires the development of management plans that include the requirement to notify the Department in writing within 10 business days of additional MNES being found. Check the species and ecological community management plans to ensure that they include the requirement to notify the Department in writing within 10 business days of additional MNES being found.	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to determine if any additional MNES were found and review the species and ecological community management plans to confirm whether any additional MNES were found. 2. Check the Protocol requires the development of management plans that include the requirement to notify the Department in writing within 10 business days of additional MNES being found. 3. Check the species and ecological community management plans to ensure that they include the requirement to notify the Department in writing within 10 business days of additional MNES being found. 4. In the event that additional MNES were found, review documentation to establish whether the Department was notified in writing within 10 business days. 	Y
	Reviewed a letter dated 31 October 2014 to Peter Blackwell, Compliance and Enforcement Branch, DoE notifying that a new MNES was found in the area of Hinchley State Forest (Lot 159 FTY793) on 18 October 2014. This is 10 business days following the discovery of the MNES and therefore in compliance with the condition. An Koala SMP is appended to the letter.	Letter dated 31 October 2014 to Peter Blackwell, Compliance and Enforcement Branch, DoE	Check that the notification of additional MNES found was provided to the Department in writing within 10 business days.		Y
5.8 h.v Measures must include the development of a management plan consistent with requirements under condition 8;	Review of SMP developed for koalas confirms that it is consistent with the requirements stipulated under condition 8.	Koala SMP appended to letter dated 31 October 2014 to Peter Blackwell, Compliance and Enforcement Branch, DoE	Check that the species and ecological community management plans have been developed consistent with the requirements of condition 8.	1. Review the species and ecological community management plans to ensure that they have been developed consistent with the requirements of condition 8.	Y
Criterion 9	The Protocol must: i. ensure constraints planning and field development decisions are made in accordance with the Protocol (including any relevant species and ecological community management plans) before final selection of specific sites for gas field development within the project area.				
5.9 The Protocol must ensure constraints planning and field development decisions are made in accordance with the Protocol (including any relevant species and ecological community management plans) before final selection of specific sites for gas field development within the project area.	<p>As detailed in the Protocol, all development decisions for proposed infrastructure are required to satisfy the development stages for execution approval. Throughout this process, assessment of constraints presented by relevant species and ecological community management plans is required.</p> <p>A review of</p> <p>The Protocol implements constraints planning and field development decisions via the Upstream Delivery Process (UDP). This consists of a three stage development process prior to execution (ie construction) evidence in QGC's UDP process map. In summary, this involves:</p> <ol style="list-style-type: none"> 1. Preliminary Activities: concept design based on desktop environment review of constraints, followed by cross departmental approvals documented in the PACR document 2. Access Clearances & Agreement: consent to entry agreement, preclearance surveys and management of any EPBC listed flora, fauna and communities in accordance with species and ecological community management plans. Subsequently stages include review of constraints and location of infrastructure (AFLR document) and landholder agreement of final layout (PSLM document) 3. Execution Approvals: Access To Work (ATW document) agreed by internal stakeholders, project managers and contractors. This marks the final selection phase of specific sites for gas field development. <p>Cross departmental approval of development decisions are documented at PACR, AFLR and ATW phases. Review of a 10% sample of these documents evidences that approval is obtained in accordance with the UDP process.</p>	Protocol; UDP process map; 10% sample of PACR, AFLR and ATWs	<p>Check the Protocol requires constraints planning and development decisions to be made in accordance with the Protocol and any relevant species and ecological community management plans.</p> <p>Decisions must be made before final selection of specific sites for the gas field development within the whole project area.</p>	<ol style="list-style-type: none"> 1. Evaluate the Protocol to determine if development decisions are required to be made in accordance with the Protocol and any relevant species and ecological community management plans. 2. Review a representative random sample of no less than 10% of development decisions to determine if they have been made in accordance with the Protocol and any relevant species and ecological community management plans. 3. Check the date of a representative random sample of no less than 10% of development decisions to determine if they have been made before final selection of specific sites for gas field development within the project area. 	Y
EPBC 2008/4398 Condition 6	The Protocol must ensure relevant information on MNES is available and used by the proponent to support field development and management decisions throughout the life of the project.				
Criterion 1	The Protocol must ensure relevant information on MNES is available.				

6.1 The Protocol must ensure relevant information on MNES is available.	<p>Protocol states that constraints information is held within QGC's GIS system. Constraints information is required to be updated whenever additional relevant information becomes available or QGC assigns an alternative constraints ranking to an existing constraint. Refer to Section 6.0, p. 39. All records of the pre-clearance survey are maintained by QGC and made available for Agency review on request. Refer to Section 6.1.1, p. 40.</p> <p>We obtained a walkthrough of the QGC's GIS system, Map Magic with GIS specialists, and observed that the ecological survey layer in the system was updated with data from preclearance surveys. Preclearance data from surveys is uploaded to the GIS systems as evidenced from screenshots of the GIS system reviewed showing preclearance survey data uploaded in the ecological constraints layer. The MapMagic GIS systems includes all of the latest ecological datasets. QGC subscribes to the departmental websites to obtain email alerts when new datasets are published. In addition, review of the 'CROME Constraint Modifications Review 17 v1.15' signed off by the Spatial Services Manager, QGC on 06/08/2014, shows that all CROME rules relating to Regional Ecosystems was updated with the new Regional Ecosystem dated (v8) published by DNRM in 2013.</p>	Protocol; walkthrough of GIS System	Check that the Protocol requires relevant information on MNES to be available.	<p>1. Check the Protocol to determine if it requires relevant information on MNES to be available.</p> <p>2. Check relevant information on MNES is available.</p>	Y
Criterion 2	Relevant information on MNES is used by the proponent to support field development and management decisions through the life of the project.				
6.2 Relevant information on MNES is used by the proponent to support field development and management decisions through the life of the project.	<p>At the preliminary activities stage, information on MNES stored in the GIS system, including the regional ecosystems dataset, is used to perform desktop level assessment of potential MNES for infrastructure in proposed locations / routes. This process includes consideration of the locational information on all Government known MNES. Subsequent preclearance surveys are used to ground truth this information and to update where necessary to update actual MNES where witnessed/detected on the ground. This is used to locate infrastructure locations/routes. In addition, as preclearance surveys are conducted throughout the life of the project for additional infrastructure, the MNES information on the GIS systems is updated accordingly. This includes any additional MNES found.</p> <p>The above was confirmed through discussions with Proponent representatives.</p>	Walkthrough of GIS system; discussions with Proponent representatives	Check that relevant information on MNES is used by the proponent to support field development and management decisions through the life of the project.	<p>1. Review documentation to confirm that relevant information on MNES has been used to support field development and management decisions throughout the life of the project.</p> <p>2. Hold discussions with stakeholder(s) to determine how relevant information on MNES has been and will continue to be used to support future field development and management decisions.</p>	Y
Management Plans for listed species and ecological communities					
EPBC 2008/4398 Condition 7	Before commencement of each major stage of gas field development the proponent must develop management plans for that area addressing each listed species and listed ecological community that, as indicated through assessment or more recent information, may be potentially impacted by gas field development within the project area (defined by condition 1), or external to the project area, as a result of gas field development. The management plans must address as a minimum, the ecological communities and species and their habitat as specified in Tables 1, 2 and 3 of these conditions:				
Criterion 1	Before commencement of each major stage of gas field development the proponent must develop management plans for that area.				
7.1 Before commencement of each major stage of gas field development the proponent must develop management plans for that area.	<p>The QCLNG project follows two phases. Phase 1 is to construct the wells and associated infrastructure up to the commissioning of the LNG plant at Curtis Island. Phase 2 begins in approximately January 2015. Management plans relevant to this Condition include the SSMP and associated Species Management Plans in the Appendix to the SSMP as confirmed via discussions with Ben power, Manager of Land & Environment Tech Services.</p> <p>Rev 0 of the SSMP was issued for use on 21 June 2011 to obtain Departmental approval. The SSMP was subsequently approved by the Department on 20 October 2011. Phase 1 then commenced on 22 October 2011, as evidenced in a letter received from the Department dated 9 November 2011. This confirms that relevant management plans were developed and approved prior to the commencement of gas field activities.</p>	Approved SSMP; DSEWPAC's Approval of the QCLNG Gasfields - Significant Species Management Plan; discussions with Ben power, Manager of Land & Environment Tech Services	Check that a management plan has been developed before the commencement of each major stage of the gas field development for that area.	Hold discussions with key stakeholders and review supporting documentation to confirm that a management plan has been developed for each major stage of the gas field development prior to the commencement of that stage.	Y
Criterion 2	The management plans must address each listed species and listed ecological community that, as indicated through assessment or more recent information, may be potentially impacted by gas field development within the project area (defined by condition 1), or external to the project area, as a result of gas field development.				

<p>7.2 Management plans must address each listed species and listed ecological community that, as indicated through assessment or more recent information, may be potentially impacted by gas field development within the project area, or external to the project area, as a result of gas field development.</p>	<p>Review of actual EBPC listed TECs and listed species identified through assessment or more recent information, may be potentially impacted by gas field development within the project area, or external to the project area, as a result of gas field development confirms that all SMPs have been included all these TECs and listed species.</p> <p>The only exception being the identification of koalas. A koala was observed on 18 October 2014 during the clearing of access to Cam well #132. Koala did not have an SMP at this time. Works were stopped immediately after the Koala was sighted and a 100m exclusion zone was set up. The FSC monitored the koala throughout the rest of the day. The area was inspected the next day and it was confirmed the koala had moved away from the immediate work area. The works were then completed after a walkthrough of the Right of Way by the FSC. Reviewed a letter dated 31 October 2014 to Peter Blackwell, Compliance and Enforcement Branch, DoE notifying that a new MNES was found in the area of Hinchley State Forest (Lot 159 FTY793) on 18 October 2014. The letter attached the koala SMP. Whilst QGC implemented reasonable mitigation actions following the sighting of the koala, clearing works were completed before the SMP was submitted and approved by the DoE.</p> <p>In addition, review of ATWs confirmed that no additional potential EPBC listed species that may be present lack an SMP.</p>	<p>Individual SMPs included in Part 5 of SSMP</p>	<p>Check that management plans address each listed species and listed ecological community that may be potentially impacted by gas field development within the project area, or external to the project area, as a result of gas field development.</p>	<p>Evaluate each management plan to determine if they address each listed species and listed ecological community that, as indicated through assessment or more recent information, may be potentially impacted by gas field development within the project area, or external to the project area, as a result of gas field development.</p>	<p>Y</p>
<p>Criterion 3</p>	<p>The management plans must address as a minimum, the ecological communities and species and their habitat as specified in Tables 1, 2 and 3 of these conditions:</p>				
<p>7.3 The management plans must address as a minimum, the ecological communities and species and their habitat as specified in Tables 1, 2 and 3 of these conditions:</p>	<p>Refer to Tables 1 - 3 below.</p>		<p>Check that the management plans address the ecological communities and species and their habitat.</p>	<p>Evaluate each management plan to determine if they address ecological communities and species and their habitats as specified in Tables 1, 2 and 3 of these conditions shown below.</p>	
<p>Table 1: Species potentially impacted by gas field development for which management plans are required</p>				<p>Independent auditor Comments</p>	<p>Compliance finding</p>
<p>Species</p>	<p>EPBC status</p>	<p>Indicative habitat</p>	<p>[field not in use]</p>		
<p><i>Dasyurus hallucatus</i> (Northern Quoll)</p>	<p>Endangered</p>	<p>Habitat generally encompasses some form of rocky area for denning purposes with surrounding vegetated habitats used for foraging and dispersal. Preferred habitat of rocky hills and escarpments, open forest and open woodland</p>	<p>[field not in use]</p>	<p>Review confirmed that an SMP, Plan 62, has been developed for the <i>Dasyurus hallucatus</i> (Northern Quoll). Refer to SSMP, Section 5.7.8.1.</p>	<p>Y</p>
<p><i>Chalinolobus dwyeri</i> (Large-eared Pied Bat, Large Pied Bat)</p>	<p>Vulnerable</p>	<p>Usually found in proximity to cliff lines and escarpments and sandstone outcrops where shallow caves appear to be used as roosts, although the species is also known to use tree hollows. Known to forage in adjoining woodlands including Brigalow ecological communities</p>	<p>[field not in use]</p>	<p>Review confirmed that an SMP, Plan 58, has been developed for the <i>Chalinolobus dwyeri</i> (Large-eared Pied Bat, Large Pied Bat). Refer to SSMP, Section 5.7.7.1.</p>	<p>Y</p>
<p><i>Turnix melanogaster</i> (Black-breasted Button-quail)</p>	<p>Vulnerable</p>	<p>Drier low closed forests, particularly semi-evergreen vine thicket, low microphyll vine forest, araucarian microphyll vine forest and araucarian notophyll vine Forest</p>	<p>[field not in use]</p>	<p>Review confirmed that an SMP, Plan 57, has been developed for the <i>Turnix melanogaster</i> (Black-breasted Button-quail). Refer to SSMP, Section 5.7.6.10.</p>	<p>Y</p>

<i>Erythrorichis radiatus</i> (Red Goshawk)	Vulnerable	Eucalypt woodland, open forest, gallery rainforest, swamp sclerophyll forest and rainforest margins, usually in association with large tracts of forest. Prefers a mosaic of vegetation types and permanent water.	[field not in use]	Review confirmed that an SMP, Plan 53, has been developed for the <i>Erythrorichis radiatus</i> (Red Goshawk). Refer to SSMP, Section 5.7.6.6.	Y
<i>Rostratula australis</i> (Australian Painted Snipe)	Vulnerable	Potentially any wetland and farm dams with suitable vegetation cover, temporary and permanent lakes, swamps and claypans. Favours freshwater swamps and samphire salt marshes.	[field not in use]	Review confirmed that an SMP, Plan 49, has been developed for the <i>Rostratula australis</i> (Australian Painted Snipe). Refer to SSMP, Section 5.7.6.2.	Y
<i>Delma torquata</i> (Collared Delma)	Vulnerable	Eucalypt or acacia dominated woodland including Brigalow ecological communities and open forest where it is associated with suitable microhabitats (exposed rocky outcrops or a sparse understorey of tussock grass, shrubs or semi-evergreen vine thickets).	[field not in use]	Review confirmed that an SMP, Plan 40, has been developed for the <i>Delma torquata</i> (Collared Delma). Refer to SSMP, Section 5.7.5.6.	Y
<i>Geophaps scripta scripta</i> (Squatter Pigeon (Southern))	Vulnerable	Grassy woodlands and open forest that are dominated by eucalypts, open grassy pastures in association with cattle grazing marshes, acacia growth and disturbed habitats (i.e. around stockyards, along roads and railways, and around settlements).	[field not in use]	Review confirmed that an SMP, Plan 54, has been developed for the <i>Geophaps scripta</i> (Squatter Pigeon (Southern)). Refer to SSMP, Section 5.7.6.7.	Y
<i>Denisonia maculata</i> (Ornamental Snake)	Vulnerable	Brigalow (<i>Acacia harpophylla</i>) woodland growing on clay, cracking clay soils and sandy soils, riverside woodland and open forest growing on natural levees and other riparian habitats. Shelters under fallen timber and in soil cracks. Known from cleared grazing and cropping lands where suitable soils exist.	[field not in use]	Review confirms that the <i>Denisonia maculata</i> (Ornamental Snake) is included in 'Table 3 - Threatened and Near Threatened Fauna Species Summary' in the SSMP. Refer to p. 37. Review confirmed that an SMP, Plan 40, has been developed for the <i>Denisonia maculata</i> (Ornamental Snake). Refer to SSMP, Section 5.7.5.6.	Y
<i>Furina dunmalli</i> (Dunmall's Snake)	Vulnerable	Brigalow (<i>Acacia harpophylla</i>) forest and woodland growing on cracking black clay and clay loam soils (usually on heavy clay soils). Also known to occur in eucalypt and callitris woodland with fallen timber and ground litter	[field not in use]	Review confirmed that an SMP, Plan 44, has been developed for the <i>Furina dunmalli</i> (Dunmall's Snake). Refer to SSMP, Section 5.7.5.10.	Y
<i>Nyctophilus timoriensis</i> (Eastern Long-eared Bat)	Vulnerable	River red gum forest, semi-arid woodlands, savannahs and open woodlands, often in association with riverine environments in Brigalow Belt of inland Queensland.	[field not in use]	Review confirmed that an SMP, Plan 60, has been developed for the <i>Nyctophilus corbeni</i> (Eastern Long-eared Bat). Refer to SSMP, Section 5.7.7.3.	Y

Table 2: Disturbance limits for listed threatened ecological communities

Ecological community	EPBC Act status	Disturbance limit (ha)	[field not in use]	Independent auditor Comments	Compliance finding
----------------------	-----------------	------------------------	--------------------	------------------------------	--------------------

Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	Endangered	73 ha	[field not in use]	Review confirmed that an SMP, Plan 1, has been developed for the Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant). Refer to SSMP, Section 5.5.1. The SMP states that clearing of Brigalow TEC will not exceed 73 ha (the disturbance limit under approval 2009/4398). This is consistent with the disturbance limit included in Table 2 of the EPBC Act.	Y
The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin	Endangered	0 (No disturbance authorised)	[field not in use]	Review confirms that an SMP, Plan 4, has been developed for The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin. Refer to SSMP, Section 5.5.4. The SMP states that no clearing has been approved for the community of native species dependent on natural discharge of groundwater from the Great Artesian Basin, which is consistent with the authorised disturbance limit listed in Table 2 of the EPBC Act.	Y
Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	Endangered	0 (No disturbance authorised)	[field not in use]	Our review confirmed that an SMP, Plan 3, has been developed for the semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions. Refer to SSMP, Section 5.5.3. The SMP states that no clearing has been approved for SEVT in the Gas Field, which is consistent with the authorised disturbance limit listed in Table 2 of the EPBC Act.	Y
Natural Grasslands of the Queensland Central Highlands and the northern Fitzroy Basin	Endangered	0 (No disturbance authorised)	[field not in use]	Our review confirms that an SMP, Plan 5, has been developed for the Natural Grasslands of the Queensland Central Highlands and the northern Fitzroy Basin. Refer to SSMP, Section 5.5.5. The SMP states that no clearing has been approved for Natural Grasslands in the Gas Field, which is consistent with the authorised disturbance limit listed in Table 2 of the EPBC Act.	Y

Table 3: Disturbance limits for listed species				Independent auditor Comments	Compliance finding
---	--	--	--	-------------------------------------	---------------------------

Species	EPBC status	Disturbance limit (ha)	Indicative habitat		
<i>Paradelma orientalis</i> (Brigalow Scaly-foot)	Vulnerable	235* ha of potential habitat	Occurs in a wide range of (dry) forest and woodland habitats, including Brigalow woodland, Vine thicket regrowth and rocky habitats on sandstone ridges to flats and gently undulating plains with clay, loam or sand. Not tolerant of clearings. Specific habitat where species found includes remnant Brigalow woodland with sparse tussock grasses on grey cracking clay soils.	Our review confirmed that an SMP, Plan 46, has been developed for the <i>Paradelma orientalis</i> (Brigalow Scaly-foot). Refer to SSMP Section 5.7.5.12. SMP states that destruction of habitat through clearing of remnant vegetation is limited to up to 235ha, which is consistent with the disturbance limit stated in Table 3 of the EPBC Act.	Y

<i>Egernia rugosa</i> (Yakka Skink)	Vulnerable	343 ^o ha of potential habitat	Open dry sclerophyll forest or woodland, Brigalow, shrublands, lancewood forests on sandy and open textured soils. Dense ground cover, cavities in soil-bound root systems of fallen trees and beneath rocks, hollow logs and animal burrows are considered to provide suitable microhabitat for this species.	Review confirms that the <i>Egernia rugosa</i> (Yakka Skink) is included in 'Table 3 - Threatened and Near Threatened Fauna Species Summary' in the SSMP. Refer to p. 37. Our review also confirms that an SMP, Plan 43, has been developed for the <i>Egernia rugosa</i> (Yakka Skink). Refer to SSMP Section 5.7.5.9. Observation: It was noted that that Plan 43 does not include explicit mention of the 343 ha disturbance limit which is required as stated in Table 3 of the EPBC Act. However, section 3.3.4 of the SSMP relating to the Offset Plan notes that 343ha of <i>Egernia rugosa</i> offsets is planned.	O
<i>Philotheca sporadica</i>	Vulnerable	10 ha	Open to closed shrubland to closed woodland. Shallow sandy to clay loams or shallow texture contrast soils with loamy surfaces and medium clay subsoils. Ironstone gravel usually present within soil column. Some sites have duricrust surfaces.	Our review confirmed that an SMP (Plan 32) has been developed for the <i>Philotheca sporadica</i> . Refer to SSMP, Section 5.6.31. Observation: It was noted that that Plan 32 does not include explicit mention of the 10 ha disturbance limit which is required as stated in Table 3 of the EPBC Act. However, section 3.3.4 of the SSMP relating to the Offset Plan notes that 80ha of <i>Philotheca sporadica</i> offsets is planned.	O
Indicator	Independent auditor Comments	Measurements made	Requirement	Verification Method	Compliance finding
EPBC 2008/4398 Condition 8	The management plans required under condition 7 must be developed by a qualified ecologist approved in writing by the Department and as a minimum address the following as is relevant to each MNES: a. current legal status (under EPBC Act); k. reference relevant conservation advice, recovery plans, or other policies, practices, standards or guidelines relevant to MNES published or approved from time to time by the Department. Note: The management plans must include sufficient detail to inform field development decisions, ongoing management and decommissioning, and management external to the project area to minimise impacts on MNES through the life of the project. Note 1: To the extent that the requirements of condition 8 are satisfied for each species, a single plan may be prepared to address a group of species which have similar ecological characteristics and habitat needs. Other conditions also require species or ecological community management plans to be developed in certain circumstances in accordance with condition 8.				
Criterion 1	Management plans required by condition 7 to be developed by a qualified ecologist approved in writing by the Department				
8.1 Management plans required by Condition 7 to be developed by a qualified ecologist approved in writing by the Department.	We has reviewed evidence of approvals of qualified ecologists and company approvals for ecologists employed by these companies and confirm that approval was granted to Unidel, the preparer of the SSMP (including all individual SMPs contained within) on 21 Apr-11. We also confirmed that resumes for the senior ecologists, Bruce Thompson and Richard Floyd, are included in Appendix 9 of the SSMP and include their respective experience and qualifications, as required by the DSEWPaC for company approval.	DSEWPaC approval of senior ecologists, Bruce Thompson and Richard Floyd and company approval granted to Unidel; qualifications for senior ecologists, Bruce Thompson and Richard Floyd, included in Appendix 9 of SSMP	Check if each species and ecological community management plan have been developed by a qualified ecologist approved in writing by the Department.	1. Review the qualifications of the ecologists who have developed each management plan. 2. Review evidence that each qualified ecologist is approved in writing by the Department.	Y
Criterion 2	As a minimum, address the following as is relevant to each MNES: a. current legal status (under EPBC Act); b. known distribution; c. known species' populations and their relationships within the region; d. extent of ecological community fragmentation within the region and if appropriate minimum patch size for that community; e. to support field identification and ecological surveys, description of the relevant characteristics of the ecological community; f. species' biology, reproduction and description of general habitat; g. to support field identification and ecological surveys, description of the species' habitat, which may be described in terms of essential habitat and microhabitat, associations with geology, soils, landscape features, associations with other native fauna and/or flora or ecological communities, and specific niche habitat descriptions; h. threats to MNES relating to the development and management of land within the gas fields including from the development, operation and decommissioning of infrastructure within the gas fields; and from groundwater extraction and aquifer depressurisation, CSG water use and disposal, whether the threat is within or outside the gas field development area; i. relevant management practices and methods to minimise impact and recover from impact that should include: i. site rehabilitation timeframes, standards and methods; ii. use of sequential clearing to direct fauna away from an impact zone; iii. re-establishment of native vegetation in linear infrastructure corridors; iv. welfare and safe handling of fauna specimens requiring relocation from impact sites; v. handling practices for flora specimens; vi. translocation practices and monitoring for translocation success; vii. monitoring methods including for rehabilitation success and recovery; j. surface and ground water quality and quantity requirements, including relevant downstream environmental quality parameters; k. reference relevant conservation advice, recovery plans, or other policies, practices, standards or guidelines relevant to MNES published or approved from time to time by the Department.				

8.2 a. current legal status (under EPBC Act);	Based on discussions with a Proponent representative, this item is relevant to all MNES. Reviewed the management plans in the SSMP including the TEC Management Plans, Threatened Flora Species and Threatened Fauna Species, noting that for each species a template pro forma lists standard information including the EPBC Act Legal Status.	Discussions with a Proponent representative; Individual SMPs included in SSMP	Check that each management plan addresses item (a) as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (a) to each MNES. 2. Check that management plans address item (a) as is relevant to each MNES.	Y
8.2 b. known distribution;	Based on discussions with a Proponent representative, this item is relevant to all MNES. Reviewed the management plans in the SSMP including the TEC Management Plans, Threatened Flora Species and Threatened Fauna Species, noting that for each species a template pro forma lists standard information including the known Distribution	Discussions with a Proponent representative; Individual SMPs included in SSMP	Check that each management plan addresses item (b) as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (b) to each MNES. 2. Check that management plans address item (b) as is relevant to each MNES.	Y
8.2 c. known species' populations and their relationships within the region;	Based on discussions with a Proponent representative, this item is relevant to all MNES. Reviewed the management plans in the SSMP including the TEC Management Plans, Threatened Flora Species and Threatened Fauna Species, noting that for each species a template pro forma lists standard information including 'Occurrence within Gas Field'	Discussions with a Proponent representative; Individual SMPs included in SSMP	Check that each management plan addresses item (c) as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (c) to each MNES. 2. Check that management plans address item (c) as is relevant to each MNES.	Y
8.2 d. extent of ecological community fragmentation within the region and if appropriate minimum patch size for that community;	Reviewed the management plans in the SSMP including the TEC Management Plans, Threatened Flora Species and Threatened Fauna Species, noting that for each species a template pro forma lists standard information including the 'Extent of Ecological Community Fragmentation in the Region'. In addition, the SSMP includes details of minimum patch size for the following TEC communities: 1. Brigalow TEC (0.5ha) 2. Weeping Myall TEC (0.5ha) 3. Natural Grasslands of the Queensland Central Highlands and norther Fitzroy Basin (various dependent on species and quality) 4. Coolibah Black Box Woodland (5ha) The SSMP was subsequently approved by the Department'.	Discussions with a Proponent representative; Individual SMPs included in SSMP	Check that each management plan addresses item (d) as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (d) to each MNES. 2. Check that management plans address item (d) as is relevant to each MNES.	Y
8.2 e. to support field identification and ecological surveys, description of the relevant characteristics of the ecological community;	Based on discussions with a Proponent representative, this item is relevant to all MNES. Reviewed the management plans in the SSMP including the TEC Management Plans, Threatened Flora Species and Threatened Fauna Species, noting that for each species a template pro forma lists standard information including the following to aid identification: • Photograph of the species • Description of the relevant characteristics of the Ecological Community	Discussions with a Proponent representative; Individual SMPs included in SSMP	Check that each management plan addresses item (e) as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (e) to each MNES. 2. Check that management plans address item (e) as is relevant to each MNES.	Y
8.2 f. species' biology, reproduction and description of general habitat;	Based on discussions with a Proponent representative, this item is relevant to all MNES. Reviewed the management plans in the SSMP including the TEC Management Plans, Threatened Flora Species and Threatened Fauna Species, noting that for each species a template pro forma lists standard information including: • Biology and Reproduction • Preferred Habitat and Microhabitat	Discussions with a Proponent representative; Individual SMPs included in SSMP	Check that each management plan addresses item (f) as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (f) to each MNES. 2. Check that management plans address item (f) as is relevant to each MNES.	Y
8.2 g. to support field identification and ecological surveys, description of the species' habitat, which may be described in terms of essential habitat and microhabitat, associations with geology, soils, landscape features, associations with other native fauna and/or flora or ecological communities, and specific niche habitat descriptions;	Based on discussions with a Proponent representative, this item is relevant to all MNES. We reviewed the management plans in the SSMP including the TEC Management Plans, Threatened Flora Species and Threatened Fauna Species, noting that for each species a template pro forma lists standard information including the description of the species' habitat, associations with geology, soils, landscape features, associations with other native fauna and/or flora or ecological communities, and specific niche habitat descriptions;	Discussions with a Proponent representative; Individual SMPs included in SSMP	Check that each management plan addresses item (g) as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (g) to each MNES. 2. Check that management plans address item (g) as is relevant to each MNES.	Y

<p>Note: Constraints mapping may be limited by available data for many species and may therefore be inadequate to map habitat requirements for planning and management purposes, or to indicate presence without on ground assessment. Condition 8 g) requires the essential components of a species' habitat to be described where relevant to support field identification and environmental constraints decision making. This should include essential habitat components for widely distributed species present in low numbers and for other species likely to be present but not often observed.</p>					
<p>8.2 h. threats to MNES relating to the development and management of land within the gas fields including from the development, operation and decommissioning of infrastructure within the gas fields; and from groundwater extraction and aquifer depressurisation, CSG water use and disposal, whether the threat is within or outside the gas field development area;</p>	<p>Based on discussions with a Proponent representative, this item is relevant to all MNES.</p> <p>Reviewed the management plans in the SSMP including the TEC Management Plans, Threatened Flora Species and Threatened Fauna Species, noting that for each species a template pro forma lists standard information including 'Project Threats' where threats resulting from the development, operation and decommissioning of infrastructure within the gas fields to the given MNES are detailed.</p> <p>The threats posed by groundwater extraction, aquifer depressurisation and CSG water extraction are addressed in the SMP for the 'Community of native species dependant on natural discharge of groundwater from the Great Artesian Basin'. Refer to SMP, Plan 4. Threat posed by CSG water use is also discussed in relation to the Maccullochella peelii peelii (Murray Cod). Refer to SSMP, Section 5.7.4.1. These are considered to be the only MNES where this criteria is relevant.</p>	<p>Discussions with a Proponent representative; Individual SMPs included in SSMP</p>	<p>Check that each management plan addresses item (h) as is relevant to each MNES.</p>	<p>1. Hold discussions with stakeholder(s) to determine the relevance of item (h) to each MNES. 2. Check that management plans address item (h) as is relevant to each MNES.</p>	<p>Y</p>
<p>Note: This part of a management plan may also indicate that a species or its habitat can co-exist with specific types of gas field operations.</p>					
<p>8.2 h.i.a. relevant management practices and methods to minimise impact and recover from impact that should include:</p>	<p>Reviewed the management plans in the SSMP including the TEC Management Plans, Threatened Flora Species and Threatened Fauna Species, noting that for each specie a template pro forma lists standard information including 'Management Strategies' such as avoidance of the species.</p>				
<p>8.2 h.i.b. site rehabilitation timeframes, standards and methods;</p>	<p>Based on discussions with a Proponent representative, this item is relevant to all MNES.</p> <p>We reviewed the management plans in the SSMP including the TEC Management Plans, Threatened Flora Species and Threatened Fauna Species, noting that for each species a template pro forma lists standard information including the site rehabilitation timeframes, standards and methods.</p>	<p>Discussions with a Proponent representative; Individual SMPs included in SSMP</p>	<p>Check that each management plan addresses item (i) i. as is relevant to each MNES.</p>	<p>1. Hold discussions with stakeholder(s) to determine the relevance of item (i) i. to each MNES. 2. Check that management plans address item (i) i. as is relevant to each MNES.</p>	<p>Y</p>
<p>8.2 h.ii. use of sequential clearing to direct fauna away from an impact zone;</p>	<p>Based on discussions with a Proponent representative, this item is relevant to all MNES.</p> <p>The SSMP includes a TEC Standard Mitigation Measure including sequential clearing in a way that directs escaping wildlife away from clearing and into adjacent native vegetation or natural areas of their own volition. This is not cited for each Significant Species Management Plans, but applies as a general requirement to all.</p>	<p>Discussions with a Proponent representative; Individual SMPs included in SSMP; SSMP</p>	<p>Check that each management plan addresses item (i) ii. as is relevant to each MNES.</p>	<p>1. Hold discussions with stakeholder(s) to determine the relevance of item (i) ii. to each MNES. 2. Check that management plans address item (i) ii. as is relevant to each MNES.</p>	<p>Y</p>
<p>8.2 h.iii. re-establishment of native vegetation in linear infrastructure corridors;</p>	<p>Based on discussions with a Proponent representative, this item is relevant to all MNES.</p> <p>The Remediation, Rehabilitation, Recovery and Monitoring Plan (RRRMP) includes a requirement to re-establish native vegetation relevant to each MNES.</p>	<p>Discussions with a Proponent representative; Individual SMPs included in SSMP; SSMP</p>	<p>Check that each management plan addresses item (i) iii. as is relevant to each MNES.</p>	<p>1. Hold discussions with stakeholder(s) to determine the relevance of item (i) iii. to each MNES. 2. Check that management plans address item (i) iii. as is relevant to each MNES.</p>	<p>Y</p>

8.2 h.iv. welfare and safe handling of fauna specimens requiring relocation from impact sites;	Based on discussions with a Proponent representative, this item is relevant to all MNES. The SSMP states that guidance will be taken from the Welfare and Safe Handling procedures consistent with the Policy and Procedure Statement No. 9 Policy for the Translocation of Threatened Fauna in New South Wales (NPWS, 2001) for all fauna where there are confirmed Impacts to TECs and EVNT Flora. This is not cited for each Significant Species Management Plans.	Discussions with a Proponent representative; Individual SMPs included in SSMP; SSMP	Check that each management plan addresses item (i) iv. as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (i) iv. to each MNES. 2. Check that management plans address item (i) iv. as is relevant to each MNES.	Y
8.2 h.v. handling practices for flora specimens;	Based on discussions with a Proponent representative, this item is relevant to all MNES. The SSMP states that for the handling of threatened flora, specimens (seeds, cuttings or other propagules) will be undertaken in accordance with Vallee et al. (2004) (the use of fungicides for seed storage, keeping cutting and other propagules moist during translocation practices) to ensure their survival as far as practicable. This is not cited for each Significant Species Management Plans.	Discussions with a Proponent representative; Individual SMPs included in SSMP; SSMP	Check that each management plan addresses item (i) v. as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (i) v. to each MNES. 2. Check that management plans address item (i) v. as is relevant to each MNES.	Y
8.2 h.vi. translocation practices and monitoring for translocation success;	Based on discussions with a Proponent representative, this item is relevant to all MNES. The SSMP states that for fauna any translocation of fauna species will be into adjacent similar habitat as close to the original area as possible. Guidance will be taken from the Welfare and Safe Handling procedures consistent with the Policy and Procedure Statement No. 9 Policy for the Translocation of Threatened Fauna in New South Wales (NPWS, 2001). For flora, the SSMP states that if disturbance is un-avoidable, a clearing permit from DERM will be required and a propagation and rehabilitation program/management plan will be developed for any individuals of threatened flora which cannot be avoided and that have been identified as able to be translocated (propagation by seed or cutting and planting in rehabilitation areas adjacent to removal site) prior to construction activities. This plan will be developed in accordance with the Guidelines for Translocation of Threatened Species in Australia (Vallee et al. 2004). Regarding monitoring, the SSMP states that monitoring of translocation and /or propagated transplant sites will be undertaken at specified intervals for the first year and then annually thereafter for a period of 5 years following translocation.	Discussions with a Proponent representative; SSMP	Check that each management plan addresses item (i) vi. as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (i) vi. to each MNES. 2. Check that management plans address item (i) vi. as is relevant to each MNES.	Y
8.2 h.vii. monitoring methods including for rehabilitation success and recovery;	Based on discussions with a Proponent representative, this item is relevant to all MNES. Review of SMPs confirms that monitoring methods, including for rehabilitation and recovery, are included for each specie under 'Rehabilitation and Recovery' in the template pro forma.	Discussions with a Proponent representative; Individual SMPs included in SSMP	Check that each management plan addresses item (i) vii. as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (i) vii. to each MNES. 2. Check that management plans address item (i) vii. as is relevant to each MNES.	Y
8.2 j. surface and ground water quality and quantity requirements, including relevant downstream environmental quality parameters;	Based on discussions with a Proponent representative, this item is relevant to all MNES. The SMPs relating to the community of native species dependent on natural discharge of groundwater from the Great Artesian Basin, and the Murray Cod discuss relevant surface and ground water quality and quantity requirements. Based on discussions with QGC representatives, other species and communities are not relevant to this requirement as they are not dependent on ground or surface water quality or quantity for survival and changes in these regimes would not result in significant impact. We noted that the Proponent's responses to DoE comments of the original SSMP noting that specific threats on native vegetation communities and other ecosystems regarding water use is considered in the Proponent's Water Monitoring and Management Plan (WMMP). The DoE then approved the SSMP on this basis.	Discussions with a Proponent representative; SSMP	Check that each management plan addresses item (j) as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (j) to each MNES. 2. Check that management plans address item (j) as is relevant to each MNES.	Y
8.2 k. reference relevant conservation advice, recovery plans, or other policies, practices, standards or guidelines relevant to MNES published or approved from time to time by the Department.	Based on discussions with a Proponent representative, this item is relevant to all MNES. We reviewed the management plans in the SSMP including the TEC Management Plans, Threatened Flora Species and Threatened Fauna Species, noting that for each species a template pro forma lists 'References', which includes reference to relevant conservation advice, recovery plans, or other policies, practices, standards or guidelines relevant to MNES published or approved by the Department.	Discussions with a Proponent representative	Check that each management plan addresses item (k) as is relevant to each MNES.	1. Hold discussions with stakeholder(s) to determine the relevance of item (k) to each MNES. 2. Check that management plans address item (k) as is relevant to each MNES.	Y
<i>Note: The management plans must include sufficient detail to inform field development decisions, ongoing management and decommissioning, and management external to the project area to minimise impacts on MNES through the life of the project.</i>					

<p>Note 1: To the extent that the requirements of condition 8 are satisfied for each species, a single plan may be prepared to address a group of species which have similar ecological characteristics and habitat needs. Other conditions also require species or ecological community management plans to be developed in certain circumstances in accordance with condition 8.</p>					
<p>EPBC 2008/4398 Condition 9</p>	<p>Each species and ecological community management plan must be submitted for the approval of the Minister. Commencement of each major stage of gas field development within the project area must not occur without written approval of a plan for each listed species and ecological community within the proposed area of development. The proponent may undertake 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 MNES, and only if the proponent has notified the Department in writing before an activity is undertaken. Approved species and ecological community management plans must be implemented.</p>				
<p>Criterion 1</p>	<p>Each species and ecological community management plan must be submitted for the approval of the Minister.</p>				
<p>9.1 Each species and ecological community management plan must be submitted for the approval of the Minister.</p>	<p>We reviewed approval of Species and Ecological Community Management Plans included in the SSMP. We note approval was obtained from Assistant Secretary, Environment Assessment Branch 2, DSEWPaC dated 20 October 2011.</p>	<p>DSEWPaC's Approval of the QCLNG Gasfields - Significant Species Management Plan</p>	<p>Submission of each species and ecological community management plan to the Minister for approval.</p>	<p>Review evidence to determine if each plan was submitted to the Minister for approval.</p>	<p>Y</p>
<p>Criterion 2</p>	<p>Commencement of each major stage of gas field development within the project area must not occur without written approval of a plan for each listed species and ecological community within the proposed area of development.</p>				
<p>9.2 Commencement of each major stage of gas field development within the project area must not occur without written approval of a plan for each listed species and ecological community within the proposed area of development.</p>	<p>As noted in 3.2, the commencement of action in the gas fields was 22 October 2011. This date was also the commencement of QGC's first major stage of gas field development. Given that written approval of the SSMP, which includes SMPs for each listed species and ecological community within the proposed area of development area was granted on 20 October 2011, We confirms that commencement of the first (and only relevant) stage of the gas field development took place post receipt of written approval.</p>	<p>DSEWPaC's Approval of the QCLNG Gasfields - Significant Species Management Plan; QCLNG Gas Field Approval EPBC2008-4398 Commencement of Action Letter</p>	<p>Check if commencement of each major stage of gas field development within the project area occurred following written approval of a plan for each listed species and ecological community within the proposed area of development.</p>	<p>1. Obtain evidence of the commencement date of each major stage of gas field development. 2. Obtain evidence of written approval of a plan for each listed species and ecological community within the proposed area. 3. Determine if approval was obtained before commencement of each major stage of gas field development.</p>	<p>Y</p>
<p>Criterion 3</p>	<p>The proponent may undertake 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 MNES, and only if the proponent has notified the Department in writing before an activity is undertaken.</p>				
<p>9.3 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 may be undertaken only if such activities will have no adverse impact on MNES, and only if the proponent has notified the Department in writing before an activity is undertaken.</p>	<p>Based on discussions with a Proponent representative, activities critical to commencement that are associated with mobilisation of plant and equipment, materials, machinery and personnel prior to the start of development were undertaken only in connection with the Miles Supply Base, a warehouse hub for equipment and supplies. The Miles Supply Base relates to the Pipeline Permit not the Gas Field EPBC Permit. No such activities were undertaken prior to the start of development of the Gas Fields under the EPBC Permit.</p>	<p>Discussions with a Proponent representative</p>	<p>Check the Proponent has undertaken activities critical to commencement that are associated with mobilisation of plant and equipment, materials, machinery and personnel only if it is determined that the activities have no adverse impact on MNES and only once the Department has been notified in writing.</p>	<p>1. Hold discussions with stakeholders to determine if activities critical to commencement that are associated with mobilisation of plant and equipment, materials, machinery and personnel were undertaken. 2. Obtain evidence of the commencement date of such activities. 3. Hold discussions with stakeholders to determine how the Proponent assessed if activities would have an adverse impact on MNES and assess if activities critical to the commencement have adverse impact on MNES. 4. Review evidence that the Department was notified in writing of any activities critical to the commencement. 5. Determine if activities were undertaken only after the Department was notified.</p>	<p>NA</p>
<p>Criterion 4</p>	<p>Check that approved species and ecological community management plans are implemented.</p>				

9.4 Approved species and ecological community management plans must be implemented.	Refer to SSMP Checklist.	Refer to SSMP Checklist in Appendix 2	Approved species and ecological community management plans must be implemented.	1. Obtain evidence to show that key elements of each approved species and ecological community management plan have been implemented (refer to management plan checklist). 2. Conduct site visits to determine if species and ecological community management plans have been implemented.	Refer to SSMP Checklist in Appendix 2
EPBC 2008/4398 Condition 10	The proponent must establish a program for routine review of the species and ecological community management plans to be undertaken by a qualified ecologist approved by the Department (with other experts as appropriate) to take into account any new information available to the proponent, including any information and advice provided by Commonwealth or Queensland Government agencies, or available from other CSG proponents.				
Criterion 1	Program for routine review of the species and ecological community management plans by a qualified ecologist approved by the Department				
10.1 Establish a program for routine review of the species and ecological community management plans by a qualified ecologist approved by the Department.	Based on discussions with a Proponent representative, the review of the species and ecological community management plans is conducted in accordance with the section 1.5 of the SSMP which requires review of the management plans every 5 years. Given that commencement of the first major stage of gas field development took place on 22 October 2011, the 5 year review requirement has not been triggered. The SSMP (which includes the process to review the SSMP) was approved by the Department on 20 October 2011. It was noted that over the past 12 months, management plans are in the process of review triggered by the commissioning of the LNG plant on Curtis Island which marks the end of Phase 1 development. This review process is still ongoing and thus evidence of reviews were yet to be finalised. The SSMP and associated management plans are reviewed by a qualified ecologist following a tender for a suitably qualified external consultant. We reviewed evidence of the ecologist approval with no issues noted.	Discussions with a Proponent representative	A program must be established to routinely review the species and ecological community management plans. This review must be undertaken by a qualified ecologist approved by the Department	1. Hold discussions with key stakeholders to identify the program established for routine review of the species and ecological community management plans. 2. Obtain evidence to determine if the species and ecological community management plans are routinely reviewed. 3. Obtain evidence to determine if the species and ecological community management plans are reviewed by a qualified ecologist. 4. Obtain evidence to determine if the qualified ecologist is approved by the Department.	Y
Criterion 2	Review must take into account any new information available to the proponent, including any information and advice provided by Commonwealth or Queensland Government agencies, or available from other CSG proponents.				
10.2 Review must take into account any new information available to the proponent, including any information and advice provided by Commonwealth or Queensland Government agencies, or available from other CSG proponents.	As noted in 10.1, review and update of the species and ecological community management plans is triggered by the commissioning of the LNG plant on Curtis Island marking the end of Phase 1 development. This review remains ongoing. Evidence pertaining to this review is yet to be finalised.	Discussions a Proponent representative	Check that the review takes into account new information available to the proponent, including information and advice provided by Commonwealth or Queensland Government agencies, or available from other CSG proponents.	Review evidence to determine if new information is taken into account by the Proponent during the review process.	NA
EPBC 2008/4398 Condition 11	The Minister may require through a request in writing the periodic review of the species and ecological community management plans, either by the Department; or alternatively by an independent qualified ecologist, or other experts, approved by the Department.				
11.1 Review of the species and ecological community management plans, either by the Department; or alternatively by an independent qualified ecologist, or other experts, approved by the Department at the Ministers request.	Based on confirmation received from a Proponent representative, the Department has not requested a periodic review of the SSMP either by the Department; or alternatively by an independent qualified ecologist, or other experts, approved by the Department.	Confirmation received from the Lead Auditing & Reporting Advisor - QCLNG Land, Environment and Compliance	Check if the Minister has requested a review of the species and ecological community management plans Determine if the reviewer was approved by the Department.	1. Check to see if the Minister has requested a periodic review of the species and ecological community management plans. 2. Review evidence to determine if the reviewer was approved by the Department.	NA
EPBC 2008/4398 Condition 12	Independent review of plans will be at the financial expense of the proponent. Once independently reviewed, plans must be submitted for written approval by the Department. Approved plans must be implemented.				
Criterion 1	Financial expenses of independent review to be paid by the proponent.				

12.1 Independent review of plans will be at the financial expense of the proponent.	Refer to 11.1	Not applicable. Refer to 11.1 above.	Check that the financial expense of the independent review was borne by the Proponent.	Review evidence to determine if any reviews of the species and ecological community management plans were at the financial expense of the Proponent.	NA
Criterion 2	Once independently reviewed, plans must be submitted for written approval by the Department.				
12.2 Once independently reviewed, plans must be submitted for written approval by the Department.	Refer to 11.1	Not applicable. Refer to 11.1 above.	Check that plans are submitted for written approval by the Department.	1. Review evidence to determine if plans were independently reviewed prior to submission to the Department. 2. Review evidence to determine if independently reviewed plans were submitted to the Department for approval.	NA
Criterion 3	Approved plans must be implemented.				
12.3 Approved plans must be implemented.	Refer to 11.1	Not applicable. Refer to 11.1 above.	Check that approved plans are implemented.	1. Review evidence to determine if species and ecological community management plans were approved by the Department. 2. Determine if approved plans have been implemented (refer to check lists for approved plans).	NA
Record of impacts					
EPBC 2008/4398 Condition 13	If an impact occurs (which may include a presumed impact where the species is presumed to be present) to a MNES during gas field development, operation, or decommissioning the proponent must: a. record the impact by reference to: i. the location, specific site and type of infrastructure or activity; ii. each MNES subject to disturbance; iii. the related site assessment or field ecological survey documentation and recommendations, or the decision that the particular MNES was presumed to be present; iv. the disturbance limit set under 25; v. the total area of actual disturbance; vi. the remaining disturbance limit for each affected MNES; vii. the reasons for the decision including justification for the action taken, description of the efforts taken to avoid impact, and explanation why other constraints might justify the impact on MNES; viii. actions and commitments by the proponent to remediate, rehabilitate, or make good any unauthorised disturbance; and <i>Note: This condition applies to any adverse impact on MNES, whether or not a disturbance limit has been set, and whether or not the impact has been decided by the proponent under the Protocol based on other physical constraints.</i> b. record the information to a standard which can be independently audited.				
Criterion 1	If an impact occurs (which may include a presumed impact where the species is presumed to be present) to a MNES during gas field development, operation, or decommissioning the proponent must: a. record the impact by reference to: i. the location, specific site and type of infrastructure or activity; ii. each MNES subject to disturbance; iii. the related site assessment or field ecological survey documentation and recommendations, or the decision that the particular MNES was presumed to be present; iv. the disturbance limit set under 25; v. the total area of actual disturbance; vi. the remaining disturbance limit for each affected MNES; vii. the reasons for the decision including justification for the action taken, description of the efforts taken to avoid impact, and explanation why other constraints might justify the impact on MNES; viii. actions and commitments by the proponent to remediate, rehabilitate, or make good any unauthorised disturbance; and <i>Note: This condition applies to any adverse impact on MNES, whether or not a disturbance limit has been set, and whether or not the impact has been decided by the proponent under the Protocol based on other physical constraints.</i>				
13.1 Record the impact by reference to:					
i. the location, specific site and type of infrastructure or activity;	The contractor conducts an As Built survey to determine the actual disturbance area of each development. Based on discussions with a Proponent representative, the contractor undertakes the As Built survey using their own engineering surveyors. The survey is then submitted to QGC as part of the completion process to obtain Practical Completion. Review of As Built surveys show that these are engineering drawings illustrating the actual specific locations of different types of infrastructure including a summary of the disturbance area impacting the MNES.	Discussions with a Proponent representative; sample of As Built survey records	Where an impact has occurred to a MNES, check that the proponent has recorded the impact by reference to (i).	Review evidence to determine if impacts to MNES during gas field development, operation or decommissioning have been recorded in accordance with (i).	Y
ii. each MNES subject to disturbance;	Review of QGC's disturbance spreadsheet show each MNES subject to disturbance.	QGC Disturbance Spreadsheet	Where an impact has occurred to a MNES, check that the proponent has recorded the impact by reference to (ii).	Review evidence to determine if impacts to MNES during gas field development, operation or decommissioning have been recorded in accordance with (ii).	Y

iii. the related site assessment or field ecological survey documentation and recommendations, or the decision that the particular MNES was presumed to be present;	Following ecological surveying and development of ATW documentation, where impacts are predicted to occur to MNES, a Record of Impacts document is developed by the Proponent's Environmental Advisor. These documents extract the key information from the preclearance surveys, the ATW and other relevant site assessments to determine if a proposed impact to MNES will occur. This information includes: • Aerial imagery and survey sketches of the site • Recommendations from the site assessments and surveys to avoid or mitigate disturbance; or • The decision that the particular MNES was presumed to be present.	Record of Impacts to MNES documents; QGC Preclearance Spreadsheet	Where an impact has occurred to a MNES, check that the proponent has recorded the impact by reference to (iii).	Review evidence to determine if impacts to MNES during gas field development, operation or decommissioning have been recorded in accordance with (iii).	Y
iv. the disturbance limit set under 25;	Review of QGC's disturbance spreadsheet notes that the disturbance limits set under Condition 25 of the DSEWPAC gas field approval have been included for each EPBC listed habitat.	QGC Disturbance Spreadsheet	Where an impact has occurred to a MNES, check that the proponent has recorded the impact by reference to (iv).	Review evidence to determine if impacts to MNES during gas field development, operation or decommissioning have been recorded in accordance with (iv).	Y
v. the total area of actual disturbance;	Review of the As Built surveys show that these are engineering drawings showing the actual disturbance areas and specific locations of different types of infrastructure. The actual disturbance areas are then transferred to QGC disturbance spreadsheet that tracks actual versus predicted disturbance	Sample of As Built Survey records; QGC Disturbance spreadsheet	Where an impact has occurred to a MNES, check that the proponent has recorded the impact by reference to (v).	Review evidence to determine if impacts to MNES during gas field development, operation or decommissioning have been recorded in accordance with (v).	Y
vi. the remaining disturbance limit for each affected MNES;	Review of QGC's disturbance spreadsheet notes the remaining disturbance limit for each affected MNES is stated.	QGC Disturbance spreadsheet	Where an impact has occurred to a MNES, check that the proponent has recorded the impact by reference to (vi).	Review evidence to determine if impacts to MNES during gas field development, operation or decommissioning have been recorded in accordance with (vi).	Y
vii. the reasons for the decision including justification for the action taken, description of the efforts taken to avoid impact, and explanation why other constraints might justify the impact on MNES;	Following preclearance surveying, where impacts are predicted to occur to MNES, a Record of Impacts document is developed by the Proponent's Environmental Advisor. Review of the Record of Impacts documents show that the information required by the criterion is provided in every case. Justifications for the action taken are based on the selection of the less environmentally damaging option given other localised constraints such as stream order 1 watercourses in the vicinity, or due to landholder constraints or site specific engineering constraints.	Sample of preclearance survey and ATW records; Records of Impacts documentation	Where an impact has occurred to a MNES, check that the proponent has recorded the impact by reference to (vii).	Review evidence to determine if impacts to MNES during gas field development, operation or decommissioning have been recorded in accordance with (vii).	Y
viii. actions and commitments by the proponent to remediate, rehabilitate, or make good any unauthorised disturbance;	Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, actions and commitments by the proponent to avoid / prevent, remediate, rehabilitate, or make good any unauthorised disturbance are not specified. Whilst the Record of Impacts documents require the actions and commitments to remediate, rehabilitate, or make good any unauthorised disturbance to be included in the pro forma, this section of the form has been entered as 'not applicable' in every case on the basis that no unauthorised disturbances have been known to occur. Following discussions with a Proponent representative it is understood that no unauthorised clearing of MNES have occurred. If this were to occur, it would be identified via the site inspection reporting process and recorded as a non-compliance before being elevated to the QGC Compliance Team who would develop a remediation plan.	Sample of preclearance survey and ATW records; Records of Impacts documentation	Where an impact has occurred to a MNES, check that the proponent has recorded the impact by reference to (viii).	Review evidence to determine if impacts to MNES during gas field development, operation or decommissioning have been recorded in accordance with (viii).	Y
<i>Note: This condition applies to any adverse impact on MNES, whether or not a disturbance limit has been set, and whether or not the impact has been decided by the proponent under the Protocol based on other physical constraints.</i>					
Criterion 2	Record the information to a standard which can be independently audited.				
13.2 Record the information to a standard which can be independently audited.	The Proponent completes Records of Impacts documentation following the preclearance survey and development of the ATW document. Samples of preclearance surveys, ATW records and Records of Impacts were reviewed and found to be clear, available, traceable and recorded in a timely manner.	Sample of preclearance survey and ATW records	Where an impact has occurred to a MNES, check that the proponent has recorded the information to a standard which can be independently audited.	Review evidence to determine if information is clear, available, traceable and recorded in a timely manner.	Y
Approval and Review of Protocol					
EPBC 2008/4398 Condition 20	The Protocol must be submitted for the approval of the Minister. Commencement of gas field development must not occur without written approval of the Protocol. The proponent may undertake 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 MNES, and only if the proponent has notified the Department in writing before an activity is undertaken. The approved Protocol must be implemented.				

Criterion 1	The Protocol must be submitted for the approval of the Minister.				
20.1 The Protocol must be submitted for the approval of the Minister.	We reviewed evidence of written approval of the Protocol (QCLNG Gas Fields Constraints Planning and Field Development Protocol, QCLNG-BX00-ENV-000023, Rev 3, October 2011) by a delegate of the minister dated 21 October 2011. Approval confirms that the Protocol was submitted for approval on 20 October 2011 and meets conditions 1,3 to 6, and 20 to 24 of EPBC 2008/4398.	DSEWPaC's Approval of the QCLNG Gasfields - Constraints Planning and Field Development Protocol	Check that the Protocol was submitted to the Minister for approval.	Review evidence to determine if the Protocol was submitted to the Minister for approval.	Y
Criterion 2	Commencement of gas field development must not occur without written approval of the Protocol.				
20.2 Commencement of gas field development must not occur without written approval of the Protocol.	Per 3.2 and 9.2 above, commencement date of gas field development began on 22 October 2011. Per 20.1, approval of the Protocol took place on 21 October 2011. Therefore, approval of the Protocol preceded the commencement of gas field development.	QCLNG Gas Field Approval EPBC2008-4398 Commencement of Action Letter	Check if commencement of gas field development occurred following written approval of the Protocol.	1. Obtain evidence of the commencement date of gas field development. 2. Obtain evidence of written approval of the Protocol by the Minister. 3. Determine if approval was obtained before commencement of gas field development.	Y
Criterion 3	The proponent may undertake 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 MNES, and only if the proponent has notified the Department in writing before an activity is undertaken.				
20.3 The proponent may undertake 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 MNES, and only if the proponent has notified the Department in writing before an activity is undertaken.	Refer to item 9.3.	Discussions with a Proponent representative	Refer to item 9.3.	Refer to item 9.3.	Refer to item 9.3.
Criterion 4	The approved Protocol must be implemented.				
20.4 The approved Protocol must be implemented.	Refer to Protocol Checklist.	Refer to Constraints Planning and Field Development Protocol Protocol Checklist in Appendix 3	The approved Protocol must be implemented	1. Hold discussions with stakeholders and review supporting documentation to determine if the Protocol has been appropriately implemented (refer to Protocol Checklist). 2. Conduct site visits to determine if the Protocol has been implemented.	Refer to Constraints Planning and Field Development Protocol Protocol Checklist in Appendix 3
EPBC 2008/4398 Condition 21	The Protocol and related plans must be reviewed and updated by the proponent to take into account the findings of the <i>Cumulative Impact Assessment Report</i> required by the Queensland Government; before each major stage of the proponent's gas field development; or following a written request from the Department. Reviewed and updated Protocols and plans must be submitted for the Minister's written approval. Once approved, updated Protocols and plans must be implemented. <i>Note: The review required following completion of the Cumulative Impact Assessment Report required by the Queensland Government may be done after approval of the Protocol. The Department may seek review of the Protocol to align with Queensland Government requirements to support efficiency and avoid duplication.</i>				
Criterion 1	The Protocol and related plans must be reviewed and updated by the proponent to take into account the findings of the <i>Cumulative Impact Assessment Report</i> required by the Queensland Government; before each major stage of the proponent's gas field development; or following a written request from the Department.				

<p>21.1 The Protocol and related plans must be reviewed and updated by the proponent to take into account the findings of the <i>Cumulative Impact Assessment Report</i> required by the Queensland Government; before each major stage of the proponent's gas field development; or following a written request from the Department.</p>	<p>Cumulative Impact Assessment Report (dated 18 Apr-2011) was written prior to the Gas Field Development stage and its findings included within the approved Protocol and SSMP which was approved by the Department. The proponent confirmed that no additional written requests from the Department have been obtained and hence there has been no further requirement to update the Protocol and related plans to take into account the findings of any updated version of the Cumulative Impact Assessment Report.</p> <p>A key finding from the Cumulative Impact Assessment ('CIA') was that impacts on TECs were likely to occur in the delivery of the projects, with the largest impact expected to occur to the Brigalow (<i>Acacia harpophylla</i>) TEC. It was noted that that the Protocol and SSMP have taken this finding into account through the development of an SMP (Plan 1) for Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant) and through the inclusion of Brigalow within QGC's Offset Plan. Similarly, threatened fauna species, Yakka Skink and Brigalow Scaly-foot, were noted in the CIA as likely to be significantly impacted by the proposed gas field developments. It was noted that the protection of these species has also been provided due consideration in the Protocol and SSMP. SMPs for both species have been developed: <i>Egernia rugosa</i> (Yakka Skink) (Plan 43) and <i>Paradelma orientalis</i> (Brigalow Scaly-foot) (Plan 46). The impact on Bioregional corridors identified by the CIA has also been included in the Protocol and SSMP, including measures to minimise impacts including the avoidance and reduction of fragmenting large, contiguous tracks or corridors of habitat which support threatened species, habitat or communities.</p>	<p>Cumulative Impact Assessment Report; Protocol; SSMP</p>	<p>Check that the Protocol and related plans were reviewed and updated by the proponent to take into account the findings of the <i>Cumulative Impact Assessment Report</i>; before each major stage of the proponent's gas field development; or following a written request from the Department.</p>	<p>Review evidence to determine if the Protocol and species and ecological community management plans were reviewed and updated to take into account the findings of the <i>Cumulative Impact Assessment Report</i>; before each major stage of the gas field development, or following a written request from the Department.</p>	<p>Y</p>
<p>Criterion 2</p>	<p>Reviewed and updated Protocols and plans must be submitted for the Minister's written approval.</p>				
<p>21.2 Reviewed and updated Protocols and plans must be submitted for the Minister's written approval.</p>	<p>Cumulative Impact Assessment Report (dated 18 Apr-2011) was written prior to the Gas Field Development stage and its findings included within the approved Protocol and SSMP. We obtained evidence of written approval from the Department for both these documents. No additional Cumulative Impact Assessment Reports have been required by the Department with respect to the Gas Field Development stage.</p>	<p>Cumulative Impact Assessment Report; DSEWPaC's Approval of the QCLNG Gasfields - Constraints Planning and Field Development Protocol; DSEWPaC's Approval of the QCLNG Gasfields - Significant Species Management Plan</p>	<p>Check that reviewed and updated Protocols and plans were submitted for the Minister's written approval</p>	<p>Review evidence to determine if the reviewed and updated Protocol and ecological community management plans were submitted for the Minister's approval, and that these updated Protocols and plans were implemented following approval.</p>	<p>Y</p>
<p>Criterion 3</p>	<p>Once approved, updated Protocols and plans must be implemented.</p>				
<p>21.3 Once approved, updated Protocols and plans must be implemented.</p>	<p>Refer to Protocol Checklist and SSMP Checklist</p>	<p>Refer to Protocol Checklist and SSMP Checklist</p>	<p>Check that approved Protocols and plans were implemented.</p>	<p>Review evidence to determine if the approved Protocol and ecological community management plans were implemented.</p>	<p>Refer to Protocol Checklist and SSMP Checklist</p>
<p>EPBC 2008/4398</p>	<p>Due to accessibility issues it was not possible to consult with the Department.</p>				
<p>Condition 22</p> <p>22.1 Review of the Protocol must take into account all relevant studies, policies, standards, guidelines and advice relating to CSG activity published or provided to the proponent by the Commonwealth or Queensland governments, or published or provided by other proponents undertaking similar activities, or published or provided by other parties, including any findings of an audit against conditions, or plans or other documentation required under the conditions of this approval.</p>	<p>Review of the Protocol has not occurred since original approval of the document in ,October 2011 (refer to Appendix 3, item 2.1B).</p> <p>Whilst the Protocol includes a requirement to be updated annually based on findings from the Cumulative Impact Assessment, required by the Queensland Government before each major stage of gas field development or following a written request from DSEWPaC, it is understood based on discussions with a Proponent representative that the Proponent has not received a written request from the Department to update the Protocol. In addition, the second major stage of field development has not yet commenced.</p> <p>Based on discussions with a Proponent representative, review of the Protocol is planned to occur before the second major stage of field development and will take into account the following relevant information:</p> <ul style="list-style-type: none"> • New legislation received via subscription emails for new regulations and updates received from the legal team regarding CSG activities. For example, new legislation relating to regional planning areas that overrides the significant cropping land regulations • Information in the Protocol refined using survey data. In particular, results from noise surveys will be used to update noise buffer constraints and the size of the no go zone <p>The Proponent's discussions with the Commonwealth and Queensland Governments have not yet commenced.</p> <p>On the basis that review of the Protocol has not yet commence, we consider this criterion is not applicable.</p>	<p>Discussions Proponent representatives</p>	<p>Check that the Protocol takes into account all relevant studies, policies, standards, guidelines and advice relating to Coal Seam Gas activity published or provided to the proponent by the Commonwealth or Queensland governments, by other proponents undertaking similar activities, or by other parties, including any findings of an audit against conditions, or plans or other documentation required under the conditions of this approval</p>	<p>1. Hold discussions with key stakeholders including the QGC, Commonwealth and Queensland Governments, to identify relevant studies, policies, standards, guidelines and advice relating to Coal Seam Gas activities published or provided to the proponent by the Commonwealth or Queensland Governments.</p> <p>2. Hold discussions with key stakeholders from QGC and conduct desk based assessment to identify relevant studies, policies, standards, guidelines and advice relating to Coal Seam Gas activities that was published or provided to QGC by its peers.</p> <p>3. Hold discussions with key stakeholders from QGC and conduct desk based assessment to identify relevant studies, policies, standards, guidelines and advice relating to Coal Seam Gas activities that was published or provided to QGC by other parties in Australia.</p>	<p>NA</p>

	No reviews of the Protocol have taken place since the first publication in October 2011. Refer above item 22.1			4. Review the Protocol to determine if it takes account of the information noted in verification method 1-3 noted above. Check that any review of the Protocol takes into account all relevant studies, policies, standards, guidelines and advice relating to CSG activity published or provided to the proponent by the Commonwealth or Queensland governments or published or provided by other proponents undertaking similar activities, or published or provided by other parties, including any findings of an audit against conditions, or plans or other documentation required under the conditions of this approval.	NA
EPBC 2008/4398 Condition 23	The Department may require through a request in writing that the Protocol and related plans be revised or amended before approval. Any such request must be acted on within the time frame specified.				
Criterion 1					
23.1 The Department may require through a request in writing that the Protocol and related plans be revised or amended before approval.	Following discussions with Proponent representatives, it is understood that the Department has not requested in writing that the Protocol and related plans be revised or amended.	Discussions with Proponent representatives	Check if the Department required the Protocol and / or Listed Species & Ecological Community Management Plans to be revised or amended before approval.	Hold discussions with the proponent and the Department to determine if the Department requested the Protocol and / or Listed Species & Ecological Community Management Plans to be revised or amended before approval.	NA
Criterion 2					
23.2 Any such request must be acted on within the time frame specified.	Not applicable. Refer to 23.1.	Not applicable.	Check that the Department's request was acted on by the proponent with the time frame specified.	1. Determine if the Department's written request specifies a time frame within which the Protocol or Listed Species & Ecological Community Management Plans should be revised and updated. 2. Determine if the proponent complied with the time frames specified where relevant.	NA
EPBC 2008/4398 Condition 24	The approved Protocol must be incorporated into the proponent's management procedures, operational plans and other relevant documentation and kept current for the life of the project.				
Criterion 1	The approved Protocol must be incorporated into the proponent's management procedures, operational plans and other relevant documentation				
24.1 The approved Protocol must be incorporated into the proponent's management procedures, operational plans and other relevant documentation and kept current for the life of the project.	Based on discussions with a Proponent representative, the approved Protocol has been incorporated into the UDP process guide, RRRMP, SSMP, Offset Plan, Field Development Plan, Environmental Management Plans, Survey guidelines. Review of the these documents confirmed that the Protocol has been incorporated into relevant management procedures and operational plans.	6 no. Plan of Operations, the UDP Process Guide, the SSMP, the Environmental Constraints Guideline	Check that the approved Protocol has been incorporated into the proponent's management procedures, operational plans and other relevant documentation	1. Hold discussions with the proponent to identify and agree relevant management procedures, operational plans and other relevant documentation that should incorporate the approved Protocol. 2. Review the proponent's key management procedures, operational plans and other relevant documentation to determine if the approved Protocol has been appropriately incorporated.	Y
Criterion 2	The approved Protocol must be kept current for the life of the project.				
24.2 The approved Protocol must be kept current for the life of the project.	Refer to Conditions 20-23	Refer to Conditions 20-23	Check that the approved Protocol is kept current for the life of the project.	Check that the Protocol has been reviewed and updated as required by Conditions 20-23.	Refer to Conditions 20-23
Disturbance Limits					
EPBC 2008/4398 Condition 25	The following maximum disturbance limits in Table 2 and Table 3 below apply to authorised unavoidable adverse impacts on MNES as a result of exploration, development, operation and decommissioning within the project area illustrated in Attachment 1, and external to it, ('whole of project' disturbance limits) and all associated activities for the life of the project.				

25.1 The following maximum disturbance limits in Table 2 and Table 3 below apply to authorised unavoidable adverse impacts on MNES as a result of exploration, development, operation and decommissioning within the project area illustrated in Attachment 1, and external to it, ('whole of project' disturbance limits) and all associated activities for the life of the project.	Refer to Tables 2 - 3 below.		Check that the disturbance to MNES is within the maximum disturbance limits in Table 2 and Table 3.	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to determine how the proponent ensures disturbance limits are adhered to. 2. Review evidence relating to site inspections, surveys or other relevant documentation to assess if disturbance limits have been adhered to. 3. Conduct site visits to determine if disturbance limits for a sample of listed species and ecological communities have been adhered to. 	Refer to Tables 2 - 3 below.
---	------------------------------	--	---	--	------------------------------

Table 2: Disturbance limits for listed threatened ecological communities

Ecological community	EPBC Act status	Disturbance limit (ha)	[field not in use]	Independent auditor Comments	Compliance finding
			[field not in use]	<p>Based on discussions with Proponent representatives, the proponent ensures disturbance limits are adhered via the following process:</p> <ol style="list-style-type: none"> 1. A pegging party survey identifies the MNES and forecast area of disturbance. 2. QGC surveyors conduct As Built surveys post clearance that describes the actual area of disturbance after clearing each site. 3. The GIS survey data from the As Built surveys is fed back to the Environment team for verification. 4. The Environment team then reconcile permissible survey limits described in the ATW documents to actual disturbance area. The Environment team maintain a spreadsheet to track permissible versus actual disturbance limits. 5. If survey limits are reached, then construction works will not be permitted in the area, and an alternative location is sourced. 6. Before each ATW is approved by the Environment team, the spreadsheet is reviewed to ensure that disturbance limits are adhered to. <p>This negates the need to ask the GIS guys to cross ref the disturbance mapping with the particular TEC]</p>	
Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	Endangered	73 ha	[field not in use]	Review of the GIS Verification Spreadsheet (dated 26 Sep-14) / disturbance spreadsheet, which is used by the Proponent to track permissible disturbance limits with actual disturbance limits for TECS, confirms that total actual disturbance to Brigalow has been 5.4736 ha. Hence, well within the required disturbance limit.	Y
The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin	Endangered	0 (No disturbance authorised)	[field not in use]	Review of GIS Verification Spreadsheet (dated 26 Sep-14) / disturbance spreadsheet, which is used by the QGC to track disturbance limits for TECS, does not included any record of actual disturbance to the community of native species dependent on natural discharge of groundwater from the Great Artesian.	Y
Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	Endangered	0 (No disturbance authorised)	[field not in use]	Review of the GIS Verification Spreadsheet (dated 26 Sep-14) / disturbance spreadsheet, which is used by the Proponent to track permissible disturbance limits with actual disturbance limits for TECS, confirms that total actual disturbance to SEVTs has been 0 ha. Hence, within the required disturbance limit.	Y

Natural Grasslands of the Queensland Central Highlands and the northern Fitzroy Basin	Endangered	0 (No disturbance authorised)	[field not in use]	Review of GIS Verification Spreadsheet (dated 26 Sep-14) / disturbance spreadsheet, which is used by the QGC to track disturbance limits for TECS, does not include any record of actual disturbance to Natural Grasslands of the Queensland Central Highlands and the northern Fitzroy Basin.	Y
---	------------	-------------------------------	--------------------	--	---

Table 3: Disturbance limits for listed species

				Independent auditor Comments	Compliance finding
Species	EPBC status	Disturbance limit (ha)	Indicative habitat		
<i>Paradelma orientalis</i> (Brigalow Scaly-foot)	Vulnerable	235* ha of potential habitat	Occurs in a wide range of (dry) forest and woodland habitats, including Brigalow woodland, Vine thicket regrowth and rocky habitats on sandstone ridges to flats and gently undulating plains with clay, loam or sand. Not tolerant of clearings. Specific habitat where species found includes remnant Brigalow woodland with sparse tussock grasses on grey cracking clay soils.	Review of the GIS Verification Spreadsheet (dated 26 Sep-14) / disturbance spreadsheet, which is used by the Proponent to track permissible disturbance limits with actual disturbance limits for EPBC Listed Fauna, confirms that total actual disturbance to Brigalow Scaly-foot has been 0 ha. Hence, within the required disturbance limit. It is understood that Brigalow Scaly foot have been found based on discussions with a Proponent representative. When found they are relocated off site by the fauna spotter.	Y
<i>Egernia rugosa</i> (Yakka Skink)	Vulnerable	343* ha of potential habitat	Open dry sclerophyll forest or woodland, Brigalow, shrublands, lancewood forests on sandy and open textured soils. Dense ground cover, cavities in soil-bound root systems of fallen trees and beneath rocks, hollow logs and animal burrows are considered to provide suitable microhabitat for this species.	Review of the GIS Verification Spreadsheet (dated 26 Sep-14)/ disturbance spreadsheet, which is used by the Proponent to track permissible disturbance limits with actual disturbance limits for EPBC Listed Fauna, confirms that total actual disturbance to Yakka Skink has been 6ha. Hence, within the required disturbance limit. Furthermore, it is understood that no Yakka Skinks have been found in the history of the project based on discussions with the MPC Site Environment team.	Y
<i>Philothea sporadica</i> (wax flower)	Vulnerable	10 ha	Open to closed shrubland to closed woodland. Shallow sandy to clay loams or shallow texture contrast soils with loamy surfaces and medium clay subsoils. Ironstone gravel usually present within soil column. Some sites have duricrust surfaces.	Review of the GIS Verification Spreadsheet (dated 26 Sep-14)/ disturbance spreadsheet, which is used by the Proponent to track permissible disturbance limits with actual disturbance limits for EPBC Listed Flora, confirms that total actual disturbance to the Kogan Wax Flower has been 1.3054 ha. Hence, within the required disturbance limit. Furthermore, confirmation was provided during Our site visit to Celeste that Kogan Wax Flowers were present. Management measures to ensure disturbance limits are adhered to were sighted during site visit.	Y
Indicator	Independent auditor Comments	Measurements made	Requirement	Verification Method	Compliance finding

Offsets: Plan to Secure Offsets

EPBC 2008/4398 Condition 26	<p>Within 6 months of the commencement of the action the proponent must prepare an Offset Plan to provide an offset area for the approved disturbance limits relating to MNES within the project area. The offset area to be secured must be an area of private land which includes at least:</p> <ul style="list-style-type: none"> a. 80 ha of <i>Philothea sporadica</i> habitat ; and b. 343 ha of potential <i>Egernia rugosa</i> (Yakka Skink) habitat which includes micro habitat required for the species; and c. 235 ha of potential <i>Paradelma orientalis</i> (Brigalow Scaly-foot) habitat which includes micro habitat required for the species; and d. 730 ha of Brigalow with representation of the following: <ul style="list-style-type: none"> i. 30% remnant Brigalow (<i>Acacia harpophylla</i> dominant and codominant); and ii. 70% which is a combination of: <ul style="list-style-type: none"> I. high value regrowth Brigalow; and II. other Brigalow regrowth with potential for management to remnant Brigalow status. <p>Note: Offsetting requirements for some species' habitat may be accommodated within the Brigalow components if this habitat is verified as present and includes specific habitat requirements for each relevant species.</p>
------------------------------------	---

Criterion 1	Within 6 months of the commencement of the action the proponent must prepare an Offset Plan.				
26.1 Within 6 months of the commencement of the action the proponent must prepare an Offset Plan.	We obtained and reviewed the Rev 0 of the Offset Plan dated May 2014. Given that commencement of gas field development activities took place on 22 October 2011, per 3.2 above, it was noted that that Offset Plan was not prepared within 6 months of these commencement activities. Based on discussions with a Proponent representative, the Offset Plan identifies parcels of land for offsetting and defines QGC's staged approach to implement the plan. We reviewed Rev 0 of the Offset Plan dated May 2014 noting that QGC have identified preliminary offset sites but have yet to commence site verification and selection, property acquisition and offset site establishment phases. It is understood that the Offsets Plan has been sent to the Department for approval. The Offsets Plan proposes to offset the maximum limit detailed in the Condition, in accordance with the Plan. QGC are currently awaiting endorsement of plan by the Department before property acquisition and offsite site establishment phases are initiated in earnest.	Offset Plan; discussions with a Proponent representative	Check that the proponent has prepared an Offset Plan within 6 months of the commencement date of gas field development.	1. Obtain an Offset Plan for the action. 2. Determine if the Offset Plan was prepared within 6 months of the commencement date of gas field development.	N
Criterion 2	The Offset Plan must provide an offset area for the approved disturbance limits relating to MNES within the project area.				
26.2 The Offset Plan must provide an offset area for the approved disturbance limits relating to MNES within the project area.	Review of the Offset Plan (pending approval from the Department) includes offset areas for the approved disturbance limits for the following MNES: - <i>Philothea sporadica</i> : offset of 80 ha - <i>Egernia rugosa</i> : offset of 343 ha - <i>Paradelma orientalis</i> (Brigalow Scaly-foot): offset of 235 ha - Brigalow: offset of 1,430 ha.	Offset Plan	Check the Offset Plan provides an offset area for the approved disturbance limits relating to MNES within the project area.	Review the Offset Plan to determine if it provides an offset area for the approved disturbance limits relating to MNES within the project area.	Y
Criterion 3	The offset area to be secured must be an area of private land which includes at least: a. 80 ha of <i>Philothea sporadica</i> habitat; and b. 343 ha of potential <i>Egernia rugosa</i> (Yakka Skink) habitat which includes micro habitat required for the species; and c. 235 ha of potential <i>Paradelma orientalis</i> (Brigalow Scaly-foot) habitat which includes micro habitat required for the species; and d. 730 ha of Brigalow with representation of the following; i. 30% remnant Brigalow (<i>Acacia harpophylla</i> dominant and codominant); and ii. 70% which is a combination of: I. high value regrowth Brigalow; and II. other Brigalow regrowth with potential for management to remnant Brigalow status.				
26.3 The offset area to be secured must be an area of private land which includes at least:					
26.3.a. 80 ha of <i>Philothea sporadica</i> habitat; and	Review of the Offset Plan notes QGC's intention to offset 80ha of <i>Philothea sporadica</i> as required under this Gas Field EPBC permit.	Offset Plan	Check that the offset area to be secured is an area of private land which includes requirement (a).	1. Review the Offset Plan to determine if it provides for the offset area required by (a). 2. Hold discussions with stakeholders to assess progress to secure the offset area required by Condition 26.	Y
26.3.b. 343 ha of potential <i>Egernia rugosa</i> (Yakka Skink) habitat which includes micro habitat required for the species; and	Review of the Offset Plan notes QGC's intention to offset 343ha of <i>Egernia rugosa</i> as required under this Gas Field EPBC permit.	Offset Plan	Check that the offset area to be secured is an area of private land which includes requirement (b).	1. Review the Offset Plan to determine if it provides for the offset area required by (b). 2. Hold discussions with stakeholders to assess progress to secure the offset area required by Condition 26.	Y
26.3.c. 235 ha of potential <i>Paradelma orientalis</i> (Brigalow Scaly-foot) habitat which includes micro habitat required for the species; and	Review of the Offset Plan notes QGC's intention to offset 235ha of <i>Paradelma orientalis</i> as required under this Gas Field EPBC permit.	Offset Plan	Check that the offset area to be secured is an area of private land which includes requirement (c).	1. Review the Offset Plan to determine if it provides for the offset area required by (c). 2. Hold discussions with stakeholders to assess progress to secure the offset area required by Condition 26.	Y
26.3.d. 730 ha of Brigalow with representation of the following;	Review of the Offset Plan notes QGC's intention to offset 1,430ha of Brigalow TEC which exceeds the requirement under this Gas Field EPBC permit.	Offset Plan	Check that the offset area to be secured is an area of private land which includes requirement (d).	1. Review the Offset Plan to determine if it provides for the offset area required by (d). 2. Hold discussions with stakeholders to assess progress to secure the offset area required by Condition 26.	Y
26.3.d.i. 30% remnant Brigalow (<i>Acacia harpophylla</i> dominant and codominant); and	Review of the Offset Plan notes QGC's intention to offset 1,430ha of Brigalow TEC including 219ha of remnant Brigalow which represents 30% of the 730ha of Brigalow required under this Gas Field EPBC permit.	Offset Plan	Check that the offset area to be secured is an area of private land which includes requirement (d) i.	1. Review the Offset Plan to determine if it provides for the offset area required by (d) i. 2. Hold discussions with stakeholders to assess progress to secure the offset area required by Condition 26.	Y
26.3.d.ii. 70% which is a combination of:					

26.3.d.ii.I. high value regrowth Brigalow; and	Review of the Offset Plan notes QGC's intention to offset 1,430ha of Brigalow TEC including 511ha of regrowth Brigalow and 700ha of land within historical distribution of Brigalow TEC, including intact elements of remnant and/or high value regrowth TEC. This exceeds the 511ha of Brigalow (high value regrowth and other Brigalow) required by the condition.	Offset Plan	Check that the offset area to be secured is an area of private land which includes requirement (d) ii I.	1. Review the Offset Plan to determine if it provides for the offset area required by (d) ii I. 2. Hold discussions with stakeholders to assess progress to secure the offset area required by Condition 26.	Y
26.3.d.ii.II. other Brigalow regrowth with potential for management to remnant Brigalow status.	Review of the Offset Plan notes QGC's intention to offset 1,430ha of Brigalow TEC including 511ha of regrowth Brigalow and 700ha of land within historical distribution of Brigalow TEC, including intact elements of remnant and/or high value regrowth TEC. This exceeds the 511ha of Brigalow (high value regrowth and other Brigalow) required by the condition.	Offset Plan	Check that the offset area to be secured is an area of private land which includes requirement (d) ii I.	1. Review the Offset Plan to determine if it provides for the offset area required by (d) ii I. 2. Hold discussions with stakeholders to assess progress to secure the offset area required by Condition 26.	Y
<i>Note: Offsetting requirements for some species' habitat may be accommodated within the Brigalow components if this habitat is verified as present and includes specific habitat requirements for each relevant species.</i>					

Appendix 2: Significant Species Management Plans (SSMP) Checklist

Ref	SSMP Requirement	Evidence	Independent Auditor Comments	Implemented?
1.5 Review of SSMP				
1.5A	QGC will submit the SSMP for approval of the Minister for DSEWPaC	See s9.1 of Audit Criteria & Methodology	See s9.1 of Audit Criteria & Methodology	See s9.1 of Audit Criteria & Methodology
1.5B	Commencement of gas field development will not occur without written approval of the SSMP	See s9.2 of Audit Criteria & Methodology	See s9.2 of Audit Criteria & Methodology	See s9.2 of Audit Criteria & Methodology
1.5C	QGC may undertake activities that are critical to commencement that are associated with mobilising plant and equipment, materials, machinery and personnel prior to the start of development only if such activities will have no adverse impact on MNES, and only if QGC has notified DSEWPaC in writing before an activity is undertaken	See s9.3 of Audit Criteria & Methodology	See s9.3 of Audit Criteria & Methodology	See s9.3 of Audit Criteria & Methodology
1.5D	The SSMP will be formally reviewed by a suitably qualified ecologist (approved by DSEWPaC)	See s10.1 of Audit Criteria & Methodology	See s10.1 of Audit Criteria & Methodology	See s10.1 of Audit Criteria & Methodology
1.5E	The SSMP will be updated by QGC every five years from the date of approval.	1. Determine the SSMPs date of approval 2. Obtain evidence to show that the SSMP has been updated at least every five years from the date of approval	Rev 0 of the SSMP was approved on 21 June 2011. Based on discussions with a Proponent representative, it is understood that Rev 2 dated 18 October 2011 incorporated the Department's comments on Rev 0. No other information was incorporated into Rev 2. Rev 2 is the approved version currently being implemented. Whilst the next review is therefore due in October 2016 a new version of the SSMP is currently undergoing final internal approval. This will inform planning for Phase 2 of the Project. The review has been triggered as a result of the commencement of commissioning of the LNG plant on Curtis Island that marks the conclusion of Phase 1.	Yes
1.5F	The review will take into account any legislative changes since the initial preparation of the document or last review, relevant studies, policies, standards, conservation advice or recovery plans relating to MNES and EVNT flora and fauna species, or information produced by QGC, the government or other parties. It will also take into consideration findings of any audit against conditions, or plans or other documentation required under the conditions of approval.	1. Hold discussions with QGC Environment Manager to identify information that have been considered in the review of the SSMP 2. Review the SSMP to determine if new information has been incorporated	Based on discussions with Proponent representatives, a review of the SSMP is currently underway ahead of the 5 year review deadline (the SSMP is due to be reviewed in October 2016 as per item 1.5E of this document). This will incorporate any new species listing and status, new project knowledge such as new or delisted MNES, new local GIS dataset published by the Government and will include the new SMP for Koala. The review is being conducted by a suitably qualified ecologist approved by the Department, as evidenced by a approval letter received from the Department dated 23 March 2015. The review is pending completion (as of November 2014), hence the requirement is not applicable.	NA
1.5G	The QGC Environment Manager will be responsible for initiating these reviews	Obtain evidence such as emails to substantiate that the QGC Environment Manager initiated the reviews of the SSMP	We obtained evidence of a Purchase Order dated 17 November 2014 signed by the General Manager Land & Environment for a contract to undertake SMP and SSMP reviews and updates.	Yes
1.5H	The SSMP will be resubmitted to DSEWPaC for approval after each formal review	See s12.2 of Audit Criteria & Methodology	See s12.2 of Audit Criteria & Methodology	See s12.2 of Audit Criteria & Methodology

1.6 Roles and Responsibilities				
1.6A	Overall responsibility for development, implementation and review of this SSMP is with the QGC General Manager, Environment.	<ol style="list-style-type: none"> 1. Hold discussions with the QGC General Manager, Environment to determine responsibilities 2. Review evidence such as roles and responsibilities matrix or job descriptions to substantiate responsibilities 	<p>Based on discussions with the General Manager, Environment, his predecessor had responsibility for developing and implementing the SSMP. The incumbent has responsibility for implementing the SSMP.</p> <p>Management plans are managed through Technical Services group. There is collaboration with the Proponent team who conduct ecological surveys. Both teams report in to the GM Environment.</p> <p>We reviewed Rev 2 of the SSMP dated 18 October 2011, noting that endorsement of the document was the responsibility of the prior General Manager Environment. The GM, Environment stated that Rev 2 was approved by his predecessor and is the current active version.</p>	Yes
1.6B	The QGC Environment Manager – QCLNG Field Operations will be responsible for implementation of the management and mitigation measures contained in this SSMP	<ol style="list-style-type: none"> 1. Hold discussions with the QGC Environment Manager, QCLNG Field Operations to determine responsibilities 2. Obtain evidence to identify who has responsibility to implement management and mitigation measures 	<p>Based on review of Rev 2 of the SSMP dated 18 October 2011, the Manager Environmental Operations is accountable for the SSMP.</p> <p>The QGC Environment Manager, QCLNG Field Operations stated that the contractors are responsible for implementing site specific plans that incorporate the requirements of the SSMP and confirmed the Manager Environmental Operations is responsible for implementation of the management and mitigation measures of the SSMP</p>	Yes
1.6C	Suitably qualified ecologists approved by the department will be responsible for conducting pre-clearance surveys	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of pre clearance surveys relating to the project 2. Identify the authors to confirm that they were suitably qualified ecologists approved by the department 	Refer to 6.1D of the Protocol Checklist	Refer to 6.1D of the Protocol Checklist
1.6D	Field Environment Officers (FEOs) will be responsible for ensuring that management procedures and mitigation measures, particularly during clearing, are being appropriately implemented	<ol style="list-style-type: none"> 1. Hold discussions with a FEO to determine responsibilities and identify management procedures and mitigation measures 2. Review a representative random sample of no less than 10% of site inspection/clearing records to determine if management procedures and mitigation measures are appropriately implemented 	<p>Based on discussions with a Proponent representative, the FEOs are responsible for ensuring that management procedures and mitigation measures, particularly during clearing, are being appropriately implemented.</p> <p>Review of a sample of site inspection reports shows that the pro forma is designed to assess compliance against a number of categories including fauna and flora management. This includes, but is not limited to a determination of whether fauna spotters are present on sight, relocation activities have been carried out, the site boundary is arranged to avoid disturbance to vegetation outside the boundary and appropriate protection areas are clearly flagged. We found no non-compliances for the 10% sample selected.</p>	Yes
1.6E	The FEO will conduct regular audits of each project site and produce a report of non-compliances with commitments. This report will be circulated to the Field Environmental Coordinator (FEC) and Project Manager	<ol style="list-style-type: none"> 1. Hold discussions with the FEO to identify responsibility for conducting planned audits of project sites 2. Review audit reports to identify inclusion of non compliances and associated commitments 3. Review email evidence to identify if audit reports have been appropriately circulated to the FEC and PM 	<p>Based on discussions with a Proponent representative the FEO conducts regular inspections of each site using a template site inspection form in accordance with an inspection schedule. The inspection reports are provided to the FES (equivalent to the FEC referenced in the Condition) for distribution to the relevant contractors to follow up any non compliances.</p> <p>Review of emails confirmed that the FES is provide site inspection reports for review.</p>	Yes

1.6F	The FEC will conduct random audits of project sites to assess the performance of the FEO in identifying non-compliance with commitments and review instances of non-compliance reported by the FEO	<ol style="list-style-type: none"> 1. Hold discussions with the FEC to identify responsibility for conducting random audits of project sites 2. Review audit reports to identify if they include an assessment of the FEO's performance in identifying and reviewing non-compliances 	<p>Based on discussions with a Proponent representative, each FES attends a site inspection approximately once per shift cycle. This is a collaborative inspection where the FES works with the FEC to improve performance and is done to ensure FEOs are consistent in the advice they provide across projects.</p> <p>We reviewed Field Environmental Checklists (site inspection reports) that showed regular attendance by the Lead FES.</p>	Yes
1.6G	Failure to implement commitments required by the FEC will be reported to the General Manager, Environment	<ol style="list-style-type: none"> 1. Hold discussions with the FEC to identify if management plan commitments have been implemented 2. Obtain evidence to determine if failure to implement commitments were reported to the GM, Environment 	<p>Based on discussions with a Proponent representative, non-compliances / actions cited in the site inspection reports are followed up by the FEOs two weeks after the inspection. If the actions have not been implemented, the FES is informed who requests the contractor to raise a non-compliance report. If there is a regulatory non compliance, it is reported directly to the Compliance team. These are communicated to the Department via sign off by the General Manager, Environment, and tracked on the Proponent's environmental compliance monitoring system. Incidents are also entered into Synergy, the Proponent's incident management system and tracked to ensure follow up.</p> <p>We held discussions with the General Manager, Environment noting he maintains oversight of non-compliances via:</p> <ul style="list-style-type: none"> • Day to day contact with the Manager Land, Environment & Water Compliance • Non compliances tabled at a weekly forum (not minuted) • Weekly email from managers describing any achievements and issues. We reviewed a weekly report noting issues to threatened flora were discussed 	Yes
1.7 Reporting				
1.7A.i	An Annual Report will be prepared by QGC and submitted to DSEWPaC and DERM that includes:	<ol style="list-style-type: none"> 1. Obtain a copy of all annual reports 2. Obtain evidence that each annual report was submitted to DSEWPaC and DERM 	<p>The Proponent was unable to provide evidence of an Annual Report submitted to DSEWPaC and DERM. Based on discussion with a Proponent representative, an Annual Report has not been developed. It is understood that the Department has not requested the Proponent to provide annual reports.</p>	No
1.7A.ii	• A summary of pre-clearance surveys and associated findings;	Review the annual reports to determine if they include/address the requirement of the SSMP		
1.7A.iii	• A summary of actual impacts to TECs and EVNT flora and fauna species and relevant approved disturbance limits;	Review the annual reports to determine if they include/address the requirement of the SSMP		
1.7A.iv	• Approved disturbance areas remaining;	Review the annual reports to determine if they include/address the requirement of the SSMP		
1.7A.v	• Offsets in place for those TECs and EVNT flora and fauna species;	Review the annual reports to determine if they include/address the requirement of the SSMP		
1.7A.vi	• A summary of rehabilitation in relation to those TECs and EVNT flora and fauna species; and	Review the annual reports to determine if they include/address the requirement of the SSMP		
1.7A.vii	• Any additional offsets that may need to be provided should the limits be close to being exceeded.	Review the annual reports to determine if they include/address the requirement of the SSMP		

1.8 Distribution and Intended Audience				
1.8A	This SSMP will be provided to DSEWPaC, CG and DERM for endorsement	Obtain evidence to show that the SSMP has been sent to DSEWPaC, the Queensland Coordinator-General and DERM for endorsement	We reviewed the letters to DSEWPaC, CG and DERM attaching the SSMP for endorsement. This is in line with the document control record of the current SSMP that shows Rev 0 of the SSMP was issued for use on 21/6/2011.	Yes
1.8B	This SSMP will be utilised by QGC personnel, contractors and consultants to assist in identifying species and TECs that may be likely to be impacted by Gas Field activities, and applying appropriate management strategies and mitigation measures to be implemented to avoid and minimise impacts	<ol style="list-style-type: none"> 1. Hold discussions with the QGC Environment Manager to identify the parties to which this SSMP was distributed 2. Hold discussions with a sample of individuals to determine if the SSMP was used to assist in identifying likely impacted species and Threatened Ecological Communities and applying management and mitigation strategies 3. Obtain evidence to confirm that the SSMP has been utilised by QGC personnel, contractors and consultants to assist in identifying species and TECs that may be likely to be impacted by Gas Field activities, and that appropriate management strategies and mitigation measures have been implemented to avoid and minimise impacts 	<p>Based on discussions with Proponent representatives, the SSMP is provided to the ecologists and pegging party teams, fauna spotters, contractors who deliver clearing and monitoring work, the FEOs, the Land & Environment Field Service who oversee the construction process and the technical leads in the Technical Services team. It is provided on the Proponent's intranet for availability of use. The document is used by these groups and individuals to identify species and TECs that may be impacted by construction, and to manage these impacts accordingly.</p> <p>The Environmental Field Constraints Assessment Guideline was reviewed which provides information to ecologists on the environmental surveying and reporting requirements including appropriate management strategies and mitigation measures. The document introduction states that it is made available to the 'the Proponent business'. individuals are also cited who were consulted and informed of the document. the Proponent personnel, contractors and consultants have utilised the SSMP.</p>	Yes
1.8C	The guidelines proposed in this document will be promulgated in the field through the following means: <ul style="list-style-type: none"> • Information obtained as a result of pre-clearance surveys will be incorporated into QGC's constraint mapping and applied in accordance with the Protocol; 	Refer to Protocol Checklist s6.1B	Refer to Protocol Checklist s6.1B	Refer to Protocol Checklist s6.1B
1.8D	<ul style="list-style-type: none"> • They will be incorporated into relevant QCLNG contractor specifications associated with Gas Field development; 	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of QCLNG contract specifications associated with gas field development 2. Determine if they include guidelines proposed in the SSMP 	<p>Based on discussions with a Proponent representative and review of the Proponent's Invitation to Tender and an example contract document, general provisions are provided in the contractor specification only. These general conditions a requirement that the Contractor 'immediately comply with the reasonable directions given by the Proponent so as to enable the Proponent to comply with its obligations under applicable HSSE laws'. There are also additional requirements on the Contractor to 'comply with all applicable laws, regulations, standards, codes of practice and where required, demonstrate compliance to the Proponent when requested'.</p> <p>Under these provisions, the Proponent exercises the requirement for contractors to develop EMPs and Environmental Control Plans (ECP) which are themselves based on constraints detailed in the associated Access To Work (ATW) document for the particular development. The ATW incorporates the guidelines of the SSMP.</p> <p>Whilst the Proponent demonstrates that SSMP guidelines are implemented via the contract EMP / ECP, the Proponent could not provide evidence to support that SSMP guidelines are incorporated into QCLNG contractor specifications</p>	No

1.8E	<ul style="list-style-type: none"> Data from these activities will be collated and captured in a QGC GIS database for analysis and reporting against the performance indicators indicated in this document; and 	<ol style="list-style-type: none"> Obtain a walk through of QGC's GIS database Determine if Gas Field activity data includes details of, inter alia, pre-clearance surveys and TEC identification, notification to DoE of new TECs, authorisation of TECs, offsetting TECs, reporting timelines and description of TEC clearance areas (as per performance indicators described in s5.4.5) Review a representative random sample of no less than 10% of data inputs (e.g. pre-clearance surveys) and confirm how & where they are captured in a GIS. 	<p>We obtained a walkthrough of the the Proponent's GIS system with GIS specialists. Data from surveys is captured and utilised as follows:</p> <ol style="list-style-type: none"> Ecologists and surveyors perform preclearance surveys of proposed development sites Ecologists identify TECs, listed species and other sensitive ecological areas within the proposed clearance area, and contracted surveyors capture the data using hand held GIS devices. Any new TECs not identified in the SSMP are identified by the ecologist at this stage and described in the pegging party report. However, based on discussions with the no new TECs have been encountered. On a daily basis, the data is uploaded into ARCGIS software to create survey sketches of the site and an accompanying information table detailing positions of sensitive species and communities Data is reviewed by the Environmental Upstream Delivery team and released via an FTTP site to the GIS team The GIS team conduct a quality control check of the data to ensure completeness Data is loaded into the Proponent's corporate GIS system, MapMagic and becomes available in CROME, the Proponent's constraint mapping system that contains constraints identified in survey data, and constraint mapping from government datasets <p>For a description of how GIS is used to track offsetting requirements of TECs, refer to AC&M 25.1</p> <p>Review of preclearance surveys shows that surveys include a drawing of proposed infrastructure supported by a schedule describing easting, northing and elevation data for each GIS survey point. For each data point a description is provided, such as start and end point of the infrastructure and individual locations or areas of native flora.</p>	Yes
1.8F	<ul style="list-style-type: none"> They will be used to inform future monitoring and review. 	<ol style="list-style-type: none"> Hold discussions with the QGC Environment Manager to determine how the guidelines in the SSMP have been used to inform future monitoring and review Obtain evidence to confirm that the guidelines in the SSMP have been used to inform future monitoring and review 	<p>Based on discussions with Proponent representatives the guidelines in the SSMP have been used inform the following monitoring actions in the field:</p> <ul style="list-style-type: none"> Ongoing monitoring of disturbance to TECs as evidenced by the Proponent's disturbance spreadsheet tracking actual disturbance limits against allowable disturbance limits Monitoring of fauna and flora management, reinstatement and rehabilitation, sediment and erosion controls, water management and weeds and pest management evidenced via site inspection reports Monitoring of rehabilitated sites evidenced by rehabilitation site inspection reports. For example, a report dated 6 May 2014 for a rehabilitated pond that assesses ongoing vegetation structure, erosion and water management issues. <p>Regarding preclearance surveys, data from the surveys is uploaded into the Proponent's GIS system which is then used to inform the future monitoring and review to develop new sites.</p>	Yes

5.1.1 Implement the Constraints Protocol				
5.1.1A	QGC will apply the procedures in the Protocol that details how constraint mapping is prepared and updated	Refer to Protocol Checklist s6.1F	Refer to Protocol Checklist s6.1F	Refer to Protocol Checklist s6.1F
5.1.1B	processes to be followed to ensure areas of high environmental value are identified early in the planning phase,	Refer to Protocol Checklist s2.3	Refer to Protocol Checklist s2.3	Refer to Protocol Checklist s2.3
5.1.1C	and if impacts are unavoidable that internal signoff and relevant approvals are obtained before infrastructure can proceed.	1. Hold discussions with relevant stakeholders to identify the signoff and approvals process for infrastructure development in sensitive areas where impacts are unavoidable 2. Obtain evidence of signoff / approvals of infrastructure development in sensitive areas where impacts are unavoidable. Review a representative random sample of no less than 10% of decisions to construct infrastructure in sensitive areas to confirm that the required signoffs were obtained prior to MNES being impacted.	Based on discussions with a Proponent representative, where impacts are unavoidable, internal sign off and approvals are obtained in the Access To Work (ATW) form which marks the end of the approvals stage of the Upstream Delivery Process (UDP) before the construction phase begins. Approvals must be obtained prior to commencement of construction. The ATW is signed off by Environment, Commercial, Tenures & Leasing, Cultural Heritage, Land, Social Performance, Water Solutions, Engineering, Well Engineering, Security, Operations and Roads. In many cases, these teams conditionally sign off the ATW subject to measures being implemented such as mitigation of impacts to TECs. We note that approval of some teams is carried forward from the prior Agreement Final Layout Request (AFLR) phase. This is because teams such as Tenures & Licensing, and Roads do not have further relevant input after the AFLR stage. Based on review of ATWs where infrastructure impacted MNES, we found that internal signoff and relevant approvals are obtained before infrastructure can proceed.	Yes
5.1.1D	In accordance with the Protocol MNES are designated as either 'very high' or 'no go' constraints in the constraint mapping.	Refer to Protocol Checklist s2.3.1A	Refer to Protocol Checklist s2.3.1A	Refer to Protocol Checklist s2.3.1A
5.1.1E	Where the constraint is 'no go', QGC will not conduct activities in the area containing MNES.	Refer to Protocol Checklist s4.1B	Refer to Protocol Checklist s4.1B	Refer to Protocol Checklist s4.1B
5.1.1F	Where the constraint is 'very high', QGC will seek alternative locations for proposed infrastructure in that location	Refer to Protocol Checklist s6.1.1C	Refer to Protocol Checklist s6.1.1C	Refer to Protocol Checklist s6.1.1C
5.1.1G	Very high is generally assigned to linear infrastructure as it is not always possible to avoid these constraints. Alternative locations may be recommended by QGC's environmental officers based on desktop analysis of environmental and other constraints, or the DSEWPC approved ecologist conducting pre-clearance surveys in the field. The approval process for determining the final location of infrastructure is described in section 3.0 of the Protocol.	1. Obtain a sample of constraints maps for linear infrastructure developments 2. Determine if linear infrastructure is determined 'very high' 3. Where linear infrastructure is not determined 'very high', hold discussions with key stakeholders to determine justifications for alternative designations 4. Review a representative random sample of no less than 10% of instances where linear infrastructure is not determined 'very high' and verify that the approval process is as described in 3.0 of the Protocol.	We conducted a walkthrough of the GIS and sighted the constraint ranking of linear infrastructure in the GIS system, noting the following: • TEC Brigalow is ranked as 'very high' for Pipelines (gatherings and trunklines) • TEC semi evergreen vine thicket is ranked as 'no go' for Pipelines This is aligned with the constraints ranking assigned per infrastructure type in Appendix A of the Protocol. We notes that TEC Semi Evergreen Vine Thicket, Great Artesian Basin, and Grassland is listed as 'no go' rather than 'very high' for pipeline infrastructure, as are other MNES including World Heritage Areas, Ramsar sites and Migratory Bird Communities and Habitats. It is understood this is because under state permit requirements, these areas are required to have a higher ranking. Any higher ranking requirement supersedes a lower ranking requirement from a different permit. The Proponent adopts the approval process described in 3.0 of the Protocol irrespective of constraint levels for each infrastructure type. Review of UDP documentation including PACRs, PSLMs, AFLRs and ATWs confirms that the approval process is adhered to.	Yes
5.1.1H	The Protocol applies for the life of the Project and will be updated regularly as additional information on constraints becomes available.	Refer to Protocol Checklist s2	Refer to Protocol Checklist s2	Refer to Protocol Checklist s2

5.12 Preclearance surveys				
5.1.2A	Pre-clearance surveys will be undertaken by a DSEWPaC approved ecologist of all areas proposed for infrastructure	Refer to Protocol Checklist s6.1D	Refer to Protocol Checklist s6.1D	Refer to Protocol Checklist s6.1D
5.1.2B	<p>The first environmental pre-clearance survey will be undertaken as part of a 'pegging party' that includes multiple assessments for environmental, engineering, land access, cultural heritage, drilling and subsurface.</p> <p>The intent of the pegging party is to reach agreement across all disciplines where the final location of infrastructure will be placed on the site. If agreement cannot be reached the matter will be referred to the Project Engineer/Manager and it may be necessary to arrange a second pegging party.</p>	Refer to Protocol Checklist s3.2.4A	Refer to Protocol Checklist s3.2.4A	Refer to Protocol Checklist s3.2.4A
5.1.2C	The pre-clearance surveys will be undertaken prior to any vegetation clearing or disturbance occurring on the site	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of field pre-clearance surveys 2. Obtain evidence to indicate the date of vegetation clearing / disturbance in the same areas covered by the pre-clearance survey sample 3. Compare the date of the pre-clearance surveys to the date of vegetation clearing to determine if pre-clearance surveys were undertaken prior to vegetation clearing / disturbance 	<p>We reviewed the preclearance surveys and cross referenced the date with the Proponents spreadsheets showing construction start date for the associated infrastructure. In every case, preclearance surveys occur prior to disturbance.</p> <p>We also reviewed a project program from the Proponent's contractor, MPC that shows the scheduling of a series of infrastructure developments. This shows that the ATW report issued after preclearing is provided to the contractor approximately 2-3 months before construction start date, which marks the start of disturbance activities.</p>	Yes
5.1.2D	Pre-clearance surveys will include a walk-through of the entire proposed disturbance area and targeted assessment for the presence of EVNT flora species and habitats for EVNT fauna species. The aim is to identify and record any environmental constraints in the proposed development area including TECs, EVNT flora species, watercourses, wetlands and assess the required buffer distances to these values (as specified in the Protocol);	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of field pre-clearance surveys 2. Determine if the methodology of the pre-clearance surveys included a walk-through of the proposed disturbance area and targeted assessment for the presence of Vulnerable and Near Threatened (EVNT) flora species and habitats for EVNT fauna species 3. Obtain the field notes and GIS records associated with the pre-clearance surveys sampled and check that the ecologist adequately covered the site to locate EVNT and other environmental constraints 	<p>Based on discussions with a Proponent representative, any threatened species within the survey area would be identified by the contractor Environment team who conduct site walkthroughs of the area before each work pack is commenced.</p> <p>This is aligned with Section 1.1 of the Environmental Field Constraints Assessment Guideline which includes a suggestion for the ecologist to conduct a rapid walk over of the site with the other survey members to indicate key constraints that may require infrastructure relocation.</p> <p>Review of preclearance surveys supports that a site walk through of the proposed disturbance area is conducted given that the surveys consistently show photographs of the site taken by pegging party individuals highlighting presence of EVNT flora and fauna species as well as site plans identifying the GPS location of EVNT flora and fauna species on site.</p>	Yes

5.1.2E	A targeted fauna habitat assessment will also be undertaken where values are high. Where a threatened fauna species and/or its habitat is noted as occurring, or likely to occur, and QGC cannot avoid disturbing the area, the ecologist will advise QGC to commission a more detailed survey in accordance with DoE Guidelines.	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of sites where values are recorded as 'high'. 2. Check that targeted fauna habitat assessments were undertaken at all these sites. 3. Review targeted fauna habitat assessments to identify if threatened fauna species / habitat is noted as occurring or likely to occur 4. If threatened fauna species / habitat is noted in the targeted fauna habitat assessment as occurring or likely to occur, determine if the ecologist advises that detailed survey should be commissioned 	<p>We reviewed all targeted fauna habitat assessments and found that approximately half were applicable to EBPC listed fauna.</p> <p>The assessments show that where threatened EPBC fauna species / habitat have been noted as occurring or likely to occur, the ecologist advised for detailed or additional surveys to be commissioned. Where disturbance was avoidable, the ecologist advised that the affected areas be avoided.</p>	Yes
5.1.2F	Second round, targeted fauna surveys will be conducted in accordance with published DoE survey guidelines.	<ol style="list-style-type: none"> 1. Obtain a copy of DoE targeted fauna survey guidelines 2. Determine if targeted fauna surveys were conducted in accordance with the DoE survey guidelines. Review a representative random sample of no less than 10% of targeted fauna surveys 	<p>Our review of second round fauna surveys related to EPBC listed amphibians including <i>Paradelma orientalis</i> (Brigalow Scaly Foot), <i>Egernia rugosa</i> (Yakka Skink), EPBC listed birds including <i>Gallingago hardwickii</i> (Australian Painted Snipe), <i>Hirundapus caudacutus</i> (White throated Needletail), <i>Lathamus discolor</i> (Swift Parrot), <i>Nettapus coromandelianus albipennis</i> (Autralian Cotton Pygmy goose) and EPBC listed mamals such as <i>Chalinolobus dwyeri</i> (large eared Pied Bat) and <i>Dasyurus hallucatus</i> (Northern Quoll).</p> <p>Surveys were conducted by third party ecologists such as Unidel, approved by the DoE to conduct preclearance surveys and with experience in fauna surveys following 'relevant DOE guidelines'. Surveys were also conducted by RPS in accordance with DOE guidelines as specified in the survey reports.</p>	Yes
5.1.2G	For each location selected for infrastructure, a report will be generated for all constraints at that location and records maintained for the reasons for selection of that location. In particular where no go, high or very high constraint areas are selected.	Refer to Protocol Checklist s4.1A	Refer to Protocol Checklist s4.1A	Refer to Protocol Checklist s4.1A
5.1.2H	The pre-clearance survey report for the proposed infrastructure will be prepared by the ecologist/s that undertook the surveys and will include recommendations as to the avoidance and mitigation measures to be adopted, and whether a spotter-catcher is required to be present during clearing to ensure injury or death to fauna species is avoided and minimised. Examples include trees with hollows, fallen timber and leaf litter that may be habitat for ground dwelling animals or habitats for aquatic animal species such as Gilgai's;	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of field pre-clearance survey reports 2. Review the pre-clearance survey reports to determine if the ecologist that undertook the surveys authored the reports 3. Review the pre-clearance survey reports to determine if they include recommendations regarding mitigation and avoidance measures, and requirements for a spotter-catcher 	Based on review of preclearance surveys, the preclearance reports confirm they are prepared by the ecologist(s) that undertook the surveys, evidenced by sign off of the individual. The preclearance surveys consistently cite recommendations to avoid sensitive ecological areas and cite the requirement for a spotter-catcher to be in attendance during clearing activities.	Yes

5.1.2I	Where environmental constraints dictate that there is not a suitable location within the chosen property, then an alternative location will be considered if available; and	1. Review a representative random sample of no less than 10% of field pre-clearance survey reports 2. Review the pre-clearance survey reports to determine if environmental constraints dictate there is no suitable location 3. If no suitable location within the chosen property is found, determine if an alternative location was considered	Review of preclearance surveys evidences that where environmental constraints dictate no suitable location, an alternative location is considered. For example, Ross well 142 was moved to avoid brigalow vegetation and Ross well 133 well was moved to avoid an unmapped stream and erosion issues.	Yes
5.1.2J	The final determination for the location of infrastructure will be by a formal process as documented in the Protocol.	Refer to Protocol Checklist s4.0	Refer to Protocol Checklist s4.0	Refer to Protocol Checklist s4.0
5.1.2K	The results of the pre-clearance ecological surveys will be recorded using portable GPS and GIS devices enabled with appropriate data collection forms, and/or will be recorded manually on a preclearance survey form. All data collected from the field assessment will be uploaded to the QGC GIS system and into the constraint mapping as soon as possible following field assessment.	Refer to Protocol Checklist s6.1.1A	Refer to Protocol Checklist s6.1.1A	Refer to Protocol Checklist s6.1.1A
5.1.2L	Prior to disturbance occurring, as part of the final determination, where a potential impact to MNES is identified, QGC will record the expected disturbance by reference to: <ul style="list-style-type: none"> • the proposed location, specific site and type of infrastructure or activity; • each MNES subject to disturbance; • the related site assessment or field ecological survey documentation and recommendations, or the decision that the particular MNES was presumed to be present; • the disturbance limit set under Condition 25 of the DSEWPAC gas field approval; • the total area of predicted disturbance; • the remaining disturbance limit for each affected MNES; • the reasons for the decision including justification for the action taken, description of the efforts taken to avoid impact, and explanation why other constraints might justify the impact on MNES; • actions and commitments by the proponent to avoid / prevent, remediate, rehabilitate, or make good any unauthorised disturbance. 	Refer to Protocol Checklist s6.1.1C	Refer to Protocol Checklist s6.1.1C	Refer to Protocol Checklist s6.1.1C
5.1.2M	Following the completion of environmental pre-clearance surveys, field data will be converted into maps and a pre-clearance report will be prepared.	Refer to Protocol Checklist s6.1.1A	Refer to Protocol Checklist s6.1.1A	Refer to Protocol Checklist s6.1.1A

5.1.2N	QGC will maintain all pre-clearance survey reports in a central database and made available for Agency review on request.	<ol style="list-style-type: none"> 1. Screenshot a screenshot of QGC's central database showing retention of all pre-clearance survey reports. 2. Identify a representative random sample of no less than 10% of locations where infrastructure has been constructed in the vicinity of environmental values. 3. Request the pre-clearance surveys for these sites. 4. Check that these are available and retained in the central database. 	Preclearance surveys are maintained by the Proponent in a central database called Incite (www.incite.com.au). We noted that all preclearance surveys requested were available.	Yes
5.1.2O	Pre-clearance survey reports will be summarised and placed on QGC's website within 20 business days prior to the relevant area being cleared (as per EPBC condition 5g).	Obtain evidence such as emails to the marketing department, to determine if pre-clearance survey reports were uploaded to QGC's website within 20 business days prior to the relevant area being cleared	We obtained evidence showing the date for which a sample of preclearance surveys were uploaded to the Proponent's website. Due to the long lead in times for the construction phase, we found that preclearance surveys are uploaded to the Proponent's website prior to clearing. However, we found that whilst clearance dates for well infrastructure was provided, clearance dates for associated gathering was not available.	Undetermined
5.1.3 Confirmed Impacts to TECs and EVNT Flora				
Commonwealth Listed TECs and Flora				
5.1.3A	<p>For those TECs and EVNT flora species that are confirmed during pre-clearance surveys and unavoidable impacts will be required to these areas the following steps will be undertaken.</p> <ul style="list-style-type: none"> • Notify DSEWPaC in writing that clearing of the TEC or Threatened flora species is required and the estimated extent of the impact (within 10 business days of identifying the species). This does not need to occur for impacts to Brigalow or Philotheca sporadica unless the disturbance limit has been reached; 	<ol style="list-style-type: none"> 1. For Commonwealth listed TECs and EVNT flora species that are confirmed during pre-clearance surveys and unavoidable impacts will be required to these areas, provide written notification to DSEWPaC that clearing of Threatened Ecological Communities or threatened flora species is required 2. Determine if the written notification includes the estimated extent of the impact 3. Obtain the relevant pre-clearance surveys for Commonwealth listed TECs and EVNT flora species 4. Determine if DSEWPaC was notified within 10 business days of identifying the species in the pre-clearance surveys 	Based on discussions with a Proponent representative, it is understood that the Proponent has not notified the Department in writing that clearing of a TEC or threatened flora species is required, with the exception of Koala (refer to 5.1.3D of this document). However, Review of the Proponent's disturbance spreadsheet shows that only Philotheca sporadica (Kogan Wax Flower), Brigalow and potential habitat for Egernia rugosa (Yakka Skink) have been cleared to date (as of 26 September 2014). We note that the potential habitat for Yakka Skink is Brigalow. On the basis that the disturbance limit has not yet been reached for Brigalow or Philotheca sporadica and neither are reportable to the Department, the Proponent has implemented this requirement.	Yes

5.1.3B	<ul style="list-style-type: none"> Tag individuals and/or barricade the area off in an appropriate manner as specified by the site Environment Representative following the principles of the Australian Standard (AS) 4970-2009 Protection of Trees on Development Sites; 	<ol style="list-style-type: none"> For those TECs and EVNT flora species that are confirmed during pre-clearance surveys and unavoidable impacts will be required to these areas, obtain evidence that individuals were tagged or the area barricaded off Obtain a copy of AS4970-2009 Protection of Trees on Development Sites Determine if the principles of AS4970 were adhered to in tagging individuals or barricading the area 	<p>Review of a site inspection reports confirmed that 'significant trees/vegetation and protected areas are clearly flagged and protected from construction'. This was supported by photos of flagged areas appended to the report. No instances of non-compliance of this requirement were noted.</p> <p>The site visit included sighting of a flagged TEC area alongside a developed access road in the Jammata area, and posts marking the boundary of TEC wax flower in the Celeste region marking the boundary of a developed access road across which development and other disturbance activities are prohibited.</p> <p>Review of AS4970-2009 describes Tree Protection Zones as restricted areas usually delineated by protective fencing. The zones should be erected before machinery or materials are brought on site and before commencement of works. As well as flagged areas, during the site visit we observed tagging of habitat trees prior to clearance. the Proponent practices broadly follow the principles of the standard.</p>	Yes
5.1.3C	<ul style="list-style-type: none"> Where the listed TEC or flora species is adjacent to the proposed clearing area QGC will consider whether clearing works can continue provided appropriate mitigation measures are put in place that comply with the principles of AS 4970-2009 Protection of Trees on Development Sites. If advised by the site Field Environment Officer that a suitable level of protection can be afforded to the TEC, plant or plant population then clearance can continue around this area. Otherwise clearance works will move to another area as deemed necessary by the site Field Environment Officer to ensure protection of the species; 	<ol style="list-style-type: none"> Hold discussions with the Field Environment Officer to identify any instances where TEC or flora species were adjacent to a proposed clearing area Hold discussions with the FEO to identify if works continued and if so, if mitigation measures were implemented in accordance with AS4970 Obtain evidence that mitigation measures were implemented in accordance with AS4970 	<p>Based on discussions with a Proponent representative, instances have occurred where construction is proposed adjacent to a TEC.</p> <p>The Access To Work (ATW) document identifies any TEC adjacent or in close proximity to the proposed development area. In response to the ATW, the contractor flags the area (sighted this during the site visit) and generates an Environmental Control Plan (ECP) that is reviewed by the the Proponent FEO. Works cannot start until the ECP has approved and signed off by the Field Environment Superintendent (FES). Site inspections are then conducted by the FEO to ensure the ECP including measures such as flagging off TEC areas, is implemented.</p> <p>We reviewed ECPs noting they identified a need to flag EPBC listed flora species adjacent to the proposed gathering alignment.</p> <p>AS4970-2009 mitigation principles include restricting activities within Tree Protection Zones (TPZ), installing protective fencing, signs and other guards to the trunk and root systems and maintaining the TPZ via mulching, watering and weed removal activities. Whilst evidence was not obtained to demonstrate that all mitigation measures described in AS4970-2009 were implemented, the Proponent's approach to identify, flag and inspect listed TEC and flora species broadly follows the principles of the Standard.</p>	Yes
5.1.3D	<ul style="list-style-type: none"> The specific TEC or Threatened flora species SMP will be updated with site specific details such as location of the species in proximity to Gas Field infrastructure, extent of impact and site specific mitigation measures to ensure that it satisfies Condition 8 and 10 of the EPBC Approval 2008/4398 and submit the SMP to DSEWPaC for noting; 	<ol style="list-style-type: none"> Obtain copies of the specific TEC or Threatened flora species SMP Review the SMP to determine if it includes the site specific details required by the SSMP Obtain evidence that the revised specific TEC or Threatened flora species SMP was submitted to DSEWPaC 	<p>Based on discussions with a Proponent representative, the specific TEC or Threatened flora species SMPs have not been updated since the initial approval by the DoE of the SMPs contained in the Significant Species Management Plan on 20 October 2011.</p> <p>Failure to update the SMPs with site specific details such as known distribution and populations as this information becomes known via habitat assessments for example, does not satisfy Condition 8 of the EPBC Approval, nor Condition 10 requiring routine review of the plans.</p>	No

5.1.3E	<ul style="list-style-type: none"> • Identification of the potential for relocation of the species and/or if the plant can be propagated to assist rehabilitation; 	Obtain evidence to determine if the potential for species relocation and/or plant propagation has been considered	<p><i>Philotheca sporadica</i> is an EPBC vulnerable species present in the project area where preclearance surveys have identified that unavoidable impacts will be required.</p> <p>Documentation reviewed demonstrates the Proponent has undertaken research to establish the most appropriate propagation techniques for <i>Philotheca sporadica</i>, and the application of these techniques to produce a sufficient number of plants to be used for offset programs.</p>	Yes
5.1.3F	<ul style="list-style-type: none"> • If the TEC or species does not have an approved disturbance limit, or it is exceeded, under the EPBC Approval 2008/4398 then identify if an offset is required for the unavoidable impacts; and 	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of pre-clearance surveys which report the presence of EPBC listed species for which no disturbance limit has been specified in EPBC approval 2008/4398. 2. Examine cumulative records of clearance of EPBC listed species with disturbance limits specified in EPBC approval 2008/4398 and determine if the disturbance limit of any species has been exceeded. 3. Hold discussions with the Field Environment Officer to identify any instances of TEC or species in proposed development areas 4. Obtain evidence to show the disturbance limits of the TEC or species 5. Cross reference the TEC or species list with the disturbance limits in the EPBC approval to identify those that do not have an approved disturbance limit or have exceeded the disturbance limit 6. Hold discussions with key stakeholders to determine if an offset is required for the unavoidable impacts 	<p>Based on discussions with a Proponent representative where impacts on TECs or species is unavoidable, an application for a clearing permit is submitted to DERM. Any conditions of the clearing permit are followed up.</p> <p>Review of the Proponent's disturbance spreadsheet that tracks actual disturbance limits against allowable disturbance limits, shows that no permissible disturbance limit has been exceeded for TECs or threatened species. For those species where no disturbance limit is approved (Weeping Myall, SEVT, Coolibah Black Box), no actual disturbance has occurred to date (as of end November 2014).</p> <p>Discussions were held with a the Proponent FEO who who was unaware of any TEC or species encountered with no disturbance limit.</p> <p>Review of preclearance surveys did not identify predicted impacts to TECs without an approved disturbance limit.</p>	Yes
5.1.3G	<ul style="list-style-type: none"> • Clearing will be undertaken of the area once the SMP is submitted and approved by DSEWPaC. 	<ol style="list-style-type: none"> 1. Obtain evidence to indicate the date of vegetation clearing relating to the area covered by SMP for Commonwealth listed TECs and flora 2. Obtain evidence to show the approval date of the SMP by DSEWPaC 3. Determine if clearing occurred before or after approval was provided by DSEWPaC 	Refer to 5.1.3Q of the Audit Criteria & Methodology document	Refer to 5.1.3Q of the Audit Criteria & Methodology document
Fauna				
5.1.3H	A fauna spotter catcher will be present during clearing (in areas where pre-clearance survey assessments have identified fauna are likely to be present, and spotter catchers are required). The roles and responsibilities of spotter catchers is to minimise impacts to fauna from clearing and are detailed in Section 5.7 of this SSMP	Obtain evidence that fauna spotter catchers were present during clearing	Pre-clearance surveys consistently cite a requirement for a spotter-catcher to be in attendance during clearing activities. During site inspections, the FEO sights fauna spotter reports. A review of site inspection reports found that whilst fauna spotter reports were not always available during inspection, they were to be provided at a later date indicating that a fauna spotter was on site during clearing activities. During the site visit conducted on 16th September, fauna spotters were sighted during clearing of access tracks to well pads.	Yes

5.1.3I.i	Fauna handling will only be undertaken by appropriately qualified and licenced spotter catchers.	1. Sight valid licences issued by DERM and qualifications/experience of fauna spotter catchers	We reviewed permit decisions issued by the DEHP confirming a Rehabilitation Permit under the Nature Conservation (Administration) Regulation 2006 was issued that allows the permit holder (spotter catchers) to observe and relocate protected animals.	Yes
5.1.3I.ii	Contact details for ecologists/fauna specialists, wildlife carers and veterinary clinics will be kept at all times in site offices and with Field Environment Officers.	2. Obtain records of contact details for ecologists/fauna specialists, wildlife carers and veterinary clinics from the Field Environment Officer	We reviewed Proponent's documentation that lists the contact details of organisations who specialise in fauna rescue and relocation, snake rescue and relocation and veterinary services, and the RSCA hotline. This is made available at site offices and with field environmental offices and other relevant personal.	Yes
5.1.3I.iii	Any translocation of fauna species will be into adjacent similar habitat as close to the original area as possible.	3. Obtain evidence to confirm that any translocation of fauna species was into adjacent similar habitat as close to the original area as possible	Fauna spotters reports were reviewed which identified the fauna name, date of relocation, and the eastings and northings of found and relocated coordinates. However, the reports did not state if the the relocated habitat was similar to the found habitat and Deloitte could not determine if the relocated coordinates met the specific requirement to 'translocate as close to the area as possible'.	Undetermined
5.1.3I.iv	Guidance will be taken from the Welfare and Safe Handling procedures consistent with the Policy and Procedure Statement No. 9 Policy for the Translocation of Threatened Fauna in New South Wales (NPWS, 2001);	4. Obtain evidence to confirm that fauna handling was undertaken consistent with the Policy and Procedure Statement No. 9 Policy for the Translocation of Threatened Fauna in New South Wales (NPWS, 2001)	If during clearing, an EPBC listed fauna species required translocation, this would be identified and conducted by a suitably qualified and licensed fauna spotter. A fauna spotter report would then be completed and provided to the Field Environment Officers who would report the incident to the Lead Field Environment Superintendent. Based on discussion with stakeholders including the Lead Field Environment Superintendent, the Proponent has not translocated threatened fauna that require the implementation of Policy and Procedure Statement No. 9 Policy for the Translocation of Threatened Fauna in New South Wales (NPWS, 2001).	NA
5.1.3J	All spotter catchers will be appropriately qualified and experienced. They will hold valid licences from DERM and deal with wildlife in accordance with the permit conditions	5. Confirm that wildlife was dealt with in accordance with permit conditions	Refer to 5.1.3I regarding qualifications and experience of spotter catchers. Based on discussions with a Proponent representative and the Environment Advisor, spotter catchers are required to comply with the Fauna Management Plan and operate under a Damage Mitigation Permit (DMP). The DMP must be supplied for all new contractors undertaking activities. Regular spot checks are conducted on spotter catchers and documented in Field Inspection Reports. We reviewed Field Inspection Reports noting that site inspections cover fauna management, in particular whether relocation records and fauna spotter reports have been completed. Based on discussions with a the Proponent FEO, the DMP is issued by DERM. the Proponent therefore do not have a role in assessing if the the spotter catchers deal with wildlife in accordance with the permit conditions. However, the Prononent spot checks spotter catchers to ensure they follow best practice evidenced through inspection of fauna spotter reports.	Yes
Commonwealth Listed Fauna				
5.1.3K	• Notify DSEWPaC that clearing of this species habitat is required and the estimated extent of the impact (within 10 business days of identifying the species or its habitat). This does not need to occur for Brigalow Scaly-foot or Yakka Skink unless the clearing limit has been reached;	1. For Commonwealth listed fauna species, obtain written notification to DSEWPaC that clearing of listed fauna species is required 2. Determine if the written notification includes the estimated extent of the impact 3. Obtain the relevant pre-clearance surveys relating to Commonwealth listed fauna species 4. Determine if DSEWPaC was notified within 10 business days of identifying the species in the pre-clearance surveys	Based on discussions with a Proponent representative, no clearing of Commonwealth Listed Fauna habitats has occurred other than Yakka Skink habitat. This was confirmed by reviewing the Proponent's 'GIS Verification Spreadsheet' that tracks actual disturbance limits against allowable disturbance limits. The spreadsheet shows that only 6ha of Yakka Skink habitat has been cleared from a permissible limit of 65.55ha. Thus, there has been no requirement to notify the Department.	NA

5.1.3L	<ul style="list-style-type: none"> The Threatened fauna species habitat will be clearly flagged and identified as a "no go" zone including a 100m buffer. Clearing will not occur within this area until the following steps have been completed: 	Obtain evidence to show that the threatened fauna species is flagged and identified as a 'no go' zone with a 100m buffer	A review of site inspection reports showed that Yakka Skink habitats were flagged off as no go zones. However, evidence could not be provided to determine if the 100m buffer required was implemented.	Undetermined
5.1.3M	<ul style="list-style-type: none"> Update the specific Fauna SMP with site specific details to ensure that it satisfies Condition 8 and 10 of the EPBC Approval 2008/4399 and submit the SMP to DSEWPaC for noting; 	<ol style="list-style-type: none"> Obtain copies of the specific fauna SMP Review the SMP to determine if it includes the site specific details required by the SSMP Obtain evidence that the revised specific fauna SMP was submitted to DSEWPaC 	<p>Based on discussions with a Proponent representative, the specific TEC or Threatened flora species SMPs have not been updated since the initial approval by the DoE of the SMPs contained in the Significant Species Management Plan on 20 October 2011. However, it is the Proponents intention to update SMPs during the next review of the SSMP currently ongoing. This will include the addition of a Koala SMP which is the only new MNES species identified during project activities since the approval of the SSMP.</p> <p>We noted a recommendation in a fauna survey report for David Block from 2012 to update the relevant SMPs in relation to Yakka Skink, Brigalow Scaly Foot and South-eastern long-eared bat with more locational specific information regarding sightings and/or the location of their habitats, mitigation measures and estimated extent of disturbance.</p> <p>Failure to update the SMPs with site specific details such as known distribution and populations as this information becomes known via fauna surveys does not satisfy Condition 8 of the EPBC Approval, nor Condition 10 requiring routine review of the plans.</p>	No
5.1.3N	<ul style="list-style-type: none"> Identify the potential for relocation of the species, and other mitigation measures if direct harm is expected to occur to the animal itself; 	Obtain evidence to determine if the potential for species relocation or other mitigation measures have been considered	<p>We reviewed the Proponent's Upstream Fauna Management Plan that describes how the Proponent proposes to prevent or minimise the risk of injury, harm or entrapment to native wildlife and livestock resulting from their activities. The objective is to minimise adverse impacts to fauna, particularly endangered, vulnerable, rare or threatened species.</p> <p>The plan describes how fauna must be appropriately relocated into an area with suitable habitat and vegetation features, as close to the capture site as possible, conducted by a qualified fauna spotter. Fauna spotters are required to prepare a report relating to fauna handling, treatment, relocation, and fatalities using the Fauna Spotter/Catcher Report Template which includes a detailed list of all fauna relocations.</p> <p>During the site visit, we witnessed a fauna spotter on site during the clearance of a proposed access road. Fauna spotters are suitability qualified and hold a Rehabilitation Permit to conduct their work including the ability to identify suitable habitats to translocate fauna to if required. We reviewed a sample of Rehabilitation Permits with no issues noted.</p>	Yes

5.1.3O	<ul style="list-style-type: none"> Identify if the animals breeding place will be impacted and if so undertake actions in accordance with the Breeding Place SMP in Appendix 2; 	<ol style="list-style-type: none"> Obtain evidence that determines if the Commonwealth listed animals' breeding place will be impacted Obtain evidence showing the actions implemented to mitigate impacts to breeding places Obtain a copy of the Breeding Place SMP (in Appendix 2 of the SSMP) Determine if the actions were in accordance with the Breeding Place SMP 	<p>Based on discussions with a Proponent representative, if a breeding place is identified during the preclearance survey, it is managed in accordance with the principles identified in the Breeding Place SMP in Appendix 2 of the SSMP. The principles cover:</p> <ol style="list-style-type: none"> Preclearance surveys: On-ground ecological assessments (pre-clear and grad walkthroughs) will be undertaken prior to any clearing of native vegetation by a qualified and experienced spotter catcher. Avoid: Avoid tampering through changing the placement of infrastructure and / or area of clearing; and avoid tampering through operational timing where practicable. Remove or Relocate: Remove and relocate an inactive breeding place to a suitable area of adjacent habitat as close as possible to the impact area. <p>Review of Fauna Spotter Catcher Reports identified one instance where relocation of a nest of Pale-headed Rosellawere disturbed after a tree was soft felled notwithstanding previous observations not identifying the presence of the chicks. The chicks were relocated to a similar hollow log nearby in accordance with the relocation description in the SMP. We note that the Pale-headed Rosella is not an EPBC listed species and this incident is understood to have occurred on a site that was not covered under the remit of this EPBC condition.</p>	Yes
5.1.3P	<ul style="list-style-type: none"> If the species does not have an approved disturbance limit, or it is exceeded, under the EPBC Approval 2008/4399 then identify if an offset is required for the unavoidable impacts to the species habitat; and 	<ol style="list-style-type: none"> Review a representative random sample of no less than 10% of pre-clearance surveys which report the presence of EPBC listed species for which no disturbance limit has been specified in EPBC approval 2008/4398. Examine cumulative records of clearance of EPBC listed species with disturbance limits specified in EPBC approval 2008/4398 and determine if the disturbance limit of any species has been exceeded. Hold discussions with the Field Environment Officer to identify any instances of Commonwealth listed fauna in proposed development areas Obtain evidence to show the disturbance limits of the Commonwealth listed fauna Cross reference the Commonwealth listed fauna with the disturbance limits in the EPBC approval to identify those that do not have an approved disturbance limit or have exceeded the disturbance limit Hold discussions with key stakeholders to determine if an offset is required for the unavoidable impacts 	Refer to 5.1.3F of this document.	Refer to 5.1.3F of this document.

5.1.3Q	<ul style="list-style-type: none"> • Clearing will be undertaken of the area once the SMP is submitted and approved by DSEWPaC. 	<ol style="list-style-type: none"> 1. Obtain evidence to indicate the date of vegetation clearing relating to the area covered by the Commonwealth listed fauna SMP 2. Obtain evidence to show the approval date of the SMP by DSEWPaC 3. Determine if clearing occurred before or after approval was provided by DSEWPaC 	<p>All Commonwealth listed fauna SMPs are included in the SSMP with the exception of the Koala SMP. The SSMP was approved by DSEWPaC on 20 October 2011. Commencement of activities in the gas fields began on 22 October 2011.</p> <p>A Koala was observed on 18 October 2014 during the clearing of access to in the Cam area. Koala did not have an SMP at this time. Works were stopped immediately after the Koala was sighted and a 100m exclusion zone was set up. The FSC monitored the Koala throughout the rest of the day. The area was inspected the next day and it was confirmed the Koala had moved away from the immediate work area. The works were then completed after a walkthrough of the Right of Way by the FSC.</p> <p>We reviewed a letter to the Compliance and Enforcement Branch, DoE notifying that a new MNES was found on 18 October 2014. The letter attached the Koala SMP.</p> <p>Whilst the Proponent implemented reasonable mitigation actions following the sighting of the Koala, clearing works were completed before the SMP was submitted and approved by the DoE.</p>	No
--------	--	--	---	----

5.1.4 Recording Impacts				
5.1.4A	<p>Following the disturbance activities, QGC will conduct a survey to record the actual extent of disturbance to MNES and record the expected disturbance by reference to:</p> <ul style="list-style-type: none"> • The actual location, specific site and type of infrastructure or activity; • Each MNES subject to disturbance; • The related site assessment or field ecological survey documentation and recommendations, or the decision that the particular MNES was presumed to be present; • The disturbance limit set under Condition 25 of the DSEWPaC gas field approval; • The total area of actual disturbance; • The remaining disturbance limit for each affected MNES; • The reasons for the decision including justification for the action taken, description of the efforts taken to avoid impact, and explanation why other constraints might justify the impact on MNES; and • Actions and commitments by the proponent to remediate, rehabilitate, or make good any unauthorised disturbance. <p>Predicted disturbances to MNES will be reconciled to actual disturbances and records updated to reflect actual disturbances. This will be reported in the Annual Reports to be submitted to DSEWPaC and DERM.</p> <p>All information recorded during pre-clearance surveys and in justifying disturbances to MNES will be recorded to a standard that can be independently audited.</p>	Refer to Protocol Checklist s6.1.1D	Refer to Protocol Checklist s6.1.1D	Refer to Protocol Checklist s6.1.1D
5.1.4B	<p>An Annual Report will be prepared by QGC and submitted to DSEWPaC and DERM that includes:</p> <ul style="list-style-type: none"> • A summary of pre-clearance surveys and associated findings; • A summary of actual impacts to TECs and EVNT flora and fauna species and relevant approved disturbance limits; • Approved disturbance areas remaining; • Offsets in place for those TECs and EVNT flora and fauna species; • A summary of rehabilitation in relation to those TECs and EVNT flora and fauna species; and • Any additional offsets that may need to be provided should the limits be close to being exceeded. 	Refer to s1.7A of this document	Refer to s1.7A of this document	Refer to s1.7A of this document
5.4.1 Identification of TECs				
5.4.1A	<p>Locations of TECs within the Gas Field (consistent with mapping included in Appendix 5 of this SSMP) will be included into the Protocol which informs the location of infrastructure to avoid these areas where possible.</p>	Determine if the locations of TECs within the gas field are included in the Protocol	<p>We cross referenced the maps of TECs present in the project area illustrated in the SSMP with the Ecological Constraints map in the Protocol.</p> <p>The Protocol illustrates ecological constraints categorised into no go, very high, high and medium at a high level, although it does not explicitly show TEC locations. By comparison, the SSMP presents individual maps showing the locations of each TEC type. The Ecological Constraints map in the Protocol is consistent with the TEC maps in the SSMP</p>	Yes

5.4.1B	<p>A pre-clearance survey will be undertaken by a suitably qualified ecologist prior to any clearing activities being undertaken. The survey will aim to verify the TEC mapping and identify any other Threatened or Near Threatened flora or fauna species that may occur in the TEC.</p> <p>Record the GPS location of any additional TECs or species that may be identified and incorporate them into the Protocol as a "no go" or "very high" constraint zone, depending on the infrastructure proposed for development.</p>	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of pre-clearance surveys 2. Determine if pre-clearance surveys were undertaken by a suitably qualified ecologists 3. For an assessment of pre-clearance surveys being undertaken prior to any clearing activities occurring, refer to section 5.1.2C of this document. 4. Determine if the pre-clearance surveys include any additional TECs or species 5. Determine if any additional TECs or species have been incorporated into the Protocol as a "no go" or "very high" constraint zone 	<p>For review of preclearance surveys conducted by a qualified ecologist approved by the Department, refer to 6.1D of the Protocol Checklist.</p> <p>For review of whether additional MNES have been found refer to 7.3A of the Protocol Checklist.</p> <p>We reviewed a letter to the Compliance and Enforcement Branch, DoE notifying that Koala were found in the area of Hinchley State Forest on 18 October 2014. The letter attached the Koala SMP. Koala are listed as a vulnerable fauna species under the EPBC Act. However, it is understood that the Protocol has not been updated since it was issued in March 2011 and therefore Koala have not been incorporated into the Protocol as a "no go" or "very high" constraint zone.</p>	No
5.4.3 TEC Standard Mitigation Measures				
5.4.3A	<p>Mitigation measures to minimise Project impacts on TECs are:</p> <ul style="list-style-type: none"> • As part of routine pre-start meetings, work crews will be briefed on any known and potential environmental constraints occurring in that work location, including TECs and any other likely significant flora and fauna species and populations they may encounter; 	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of site specific inductions or tool box talks provided to site personnel prior to work commencing 2. Determine if they include environmental constraints such as TECs 	<p>Based on discussions with a Proponent representative, pre start meetings are held to discuss both environmental and safety considerations. During the meeting an environmental summary is presented. Environmental summaries were reviewed and noted to include a description of the environmental constraints relating to clearing, erosion, sediment controls, weeds, flora, fauna and noise. However, the documents provided no indication of their purpose or an indication of who they are distributed to. Attendance records nor minutes of the pre start meetings are maintained.</p>	Undetermined
5.4.3B	<ul style="list-style-type: none"> • Prior to clearing, the extent of clearing areas will be clearly marked out and any adjacent TECs identified as "no go" zones. TECs will be clearly marked out with appropriate flagging material and/or barricade webbing as determined by the site Environment Representative; 	<ol style="list-style-type: none"> 1. Obtain evidence of clearly marked clearing areas such as site inspection reports including photos of such areas 2. If unavailable, hold discussions with the Environment Representative to determine if any areas are due to be cleared 3. If areas are due to be cleared, undertake a site visit to determine if areas to be cleared are marked and any adjacent TECs identified as "no go" zones 	<p>We conducted a site visit on 16th September 2014 of the Phase 1 gas fields in the region of Chinchilla and Dalby. The site visit included sighting of a flagged TEC area alongside a developed access road in the Jammatt area, and posts marking the boundary of TEC wax flower in the Celeste region marking the boundary of a developed access road. The posts were used as an alternative to flagging in response to a land owner request.</p> <p>We also sighted an area that was due to be cleared. The area was not adjacent to TECs but was marked out using white posts pegged into the ground at regular intervals</p>	Yes
5.4.3C	<ul style="list-style-type: none"> • Clearing areas will be recorded for future reporting requirements; 	<p>Obtain evidence to show that clearing areas have been recorded in a manner that enables the reporting of total clearing of each TEC to be reported</p>	<p>As built surveys are conducted before practical completion of the development that records the actual area cleared. The cleared area is entered into and the the Proponent's disturbance spreadsheet and tracked against permissible disturbance limits. Review of the disturbance spreadsheet confirms clearing areas are recorded.</p>	Yes

5.4.3D	<ul style="list-style-type: none"> Clearing is to be carried out in a sequential manner and in a way that directs escaping wildlife away from clearing and into adjacent native vegetation or natural areas of their own volition. Sequential clearing coupled with the slow nature of the clearing activities will take into account any variation in landscape features such as rocky escarpments, riparian habitats and steep sloping areas and provide fauna with sufficient time to exit the disturbance area; 	<ol style="list-style-type: none"> Hold discussions with key stakeholders to identify the clearing methodology adopted Obtain evidence to show the clearing methodology adopted Determine if the methodology was staged, slow and takes account of variations in landscape features 	<p>Based on discussions with a Proponent representative and observations during a site visit conducted on 16 September 2014, clearing is staged with an initial preconstruction phase to flag off any sensitive areas including TECs and habitat trees and disturbance limits. The vegetation within the marked area is then felled with the exception of all habitat features. The following day vegetation is pushed to the side of the marked area and habitat features are removed slowly using a tree grabber and placed to the site of the site amongst the cleared vegetation. Vegetation is not left in situ for more than a day since it is then considered a new habitat where fauna colonise. The clearing process takes from 3 days up to a week depending on the size of the site.</p> <p>During the site visit, we observed preclearance areas that were marked for clearance and areas in the process of being cleared including retention of habitat trees, tree grabber machinery on site and instances where habitat trees had been placed on the perimeter of the cleared area.</p> <p>We reviewed Fauna Spotter Catcher Reports that demonstrated that clearing activities took account of variations in landscape features such as rocks, burrow and landform types.</p>	Yes
5.4.3E	<ul style="list-style-type: none"> All clearing activities will be carried out in a manner that will not result in the isolation of habitat, habitat features or any noted fauna persisting within the RW. Sequential clearing activities will provide safe escape routes for fauna and allow sufficient time for fauna spotter catchers to identify any potential fauna habitat, habitat features or fauna for relocation prior to clearing and identify this for consideration by the clearing team. Decisions will then be made jointly between the spotter catchers and construction contractor as to the most appropriate clearing method based on each situation and the surrounding landscape/geological features; 	<ol style="list-style-type: none"> Determine if clearing activities have been carried out in the manner specified: <ul style="list-style-type: none"> no resultant isolation of habitat, habitat features or any noted fauna persisting; sequential clearing to provide escape routes etc. 	<p>Based on discussions with Proponent representatives, sequential clearing is undertaken including thinning and retaining of habitat trees. Spotter catchers are employed as is the use of elevated work platforms to inspect tree hollows and tree grabbers to aid in relocation of habitat features.</p> <p>During the site visit conducted on 16 September 2014, we observed sequential clearing and the retention of habitat features - refer to 5.4.3D.</p>	Yes
5.4.3F	<ul style="list-style-type: none"> Cleared vegetation will not be pushed into adjacent TECs, other vegetated areas or environmentally sensitive areas such as waterways and gullies; 	<ol style="list-style-type: none"> Hold discussions with key stakeholders to identify how cleared vegetation is disposed Conduct a site visit to determine if cleared vegetation has been pushed into adjacent TECs, other vegetated areas, waterways or gullies If vegetation has not been recently cleared at the time of the site visit, obtain other evidence such as site inspection reports showing how vegetation was cleared 	<p>Based on discussions a Proponent representative and observations during a site visit conducted on 16 September 2014, the disturbance limit of a proposed construction site is marked out using posts marking the boundary of the disturbance area. Cleared vegetation is stockpiled along the boundary of the marked area. In addition, the Land Access Rules which is an agreement between the Proponent and the landholder states that no vegetation will be stockpiled outside the right of way (ie clearance boundaries). This requirement is also monitored as part of the FEO site inspection process. During the site visit, we inspected four cleared sites observing that the vegetation was stockpiled alongside the disturbance boundary but did not encroach on TECs, other vegetated areas or waterways or gullies.</p>	Yes
5.4.3G	<ul style="list-style-type: none"> Vehicle activities will be restricted to roads, access tracks and hardened surfaces wherever possible to reduce the possibility of wildfire, spread of weeds and any potential impact on significant or other species; 	<p>Conduct a site visit to determine if vehicle use is restricted to roads, access tracks and hardened surfaces</p>	<p>We conducted a site visit on 16 September 2014 during which we observed the ongoing development and completed development of multiple well pads, gathering lines and access roads. We did not observe any instances where land other than roads, access tracks and hardened surfaces were in use.</p>	Yes

5.4.3H	<ul style="list-style-type: none"> Vegetation disturbed as a consequence of development for linear infrastructure corridors (pipelines and access tracks) will be rehabilitated as soon as practicable but within nine months following the completion of construction, operational or decommissioning works in accordance with the Remediation, Rehabilitation, Recovery and Monitoring Plan (RRRMP); 	<ol style="list-style-type: none"> Hold discussions with key stakeholders to determine the extent of linear infrastructure development and their associated completion / operation / decommissioning dates Review a representative random sample of no less than 10% of site rehabilitation / inspection reports for linear infrastructure developments Determine if linear infrastructure corridors were rehabilitated within nine months following completion of construction, operation or decommissioning works 	<p>Based on discussions with a Proponent representative and a site visit conducted on 16 September 2014, the completion of linear infrastructure is tracked using the Proponent's Completions Management System. Regarding the completion process, before linear infrastructure is handed over to Operations, it must go through a process 'gate' including a Systems Completion gate. This involves the Environment team signing off the completion before it becomes operational, after which there is a 30 day requirement to complete rehabilitation. Following the completion of construction, contractors are unable to leave the area and are not remunerated until the Systems Completion is signed off including the check by the FEO Completions Team.</p> <p>We reviewed a sample of 'punch lists' that show the completion dates of various contractor tasks including rehabilitation. We compared the sign off of the rehabilitation tasks in the punch lists to the practical completion date from the Proponent's management system. In each case rehabilitation occurred within 9 months following completion of construction, operational or decommissioning works.</p>	Yes
5.4.3I	<ul style="list-style-type: none"> Compliance with industry standards and operational Environment Management Plan (EMPs) for the Project will ensure that receiving environments are not adversely impacted by the release of CSG water from operational activities; 	<ol style="list-style-type: none"> Hold discussions to understand QGC's review and audits relating to performance against operational EMPs and industry standards Based on the discussions determine if receiving environments are being / would be adversely impacted by the release of CSG water Obtain evidence to confirm that receiving environments are not adversely impacted by the release of CSG water from operational activities 	<p>Based on discussions with a Proponent representative, the audit schedule identifies the Proponent's high environmental risk activities and audits are conducted on this basis. The contractor then develops an EMP based on the permit requirements. The Proponent's compliance team audits against conditions of permits and the Proponent's field team audit against EMP requirements. The audits determine the nature and quantity of the discharge and take sample to determine if the environment is adversely affected. If it is found that water is released in breach of the limits specified in the Environmental Authority and the environment has been adversely impacted, the Proponent notify the DoE. We reviewed notifications to the DEHP describing incidents. However, these did not result in adverse impacts to the environment.</p> <p>We reviewed an Internal Audit Report in relation to gathering construction noting that water management was an audit focus area. The audit assessed the processes and controls of upstream gathering activities and determined there are adequate processes and controls in place by both QGC and MPC to appropriately manage environmental risks. There were no potentially significant environmental risks identified, including any non-conformances that would require immediate attention.</p> <p>The review of compliance requirements identified that water quality monitoring could be undertaken by both QGC and MPC to verify that turbidity has not increased as a result of construction activities and a monitoring program could be developed for water quality monitoring by MPC which includes dust suppression and hydrotest water.</p> <p>The audit found one minor non compliance noting that no evidence to support water sources are monitored or hydrotest water is appropriately disposed after use by MPC. However, we do not consider this means receiving waters were 'adversely impacted' by the release of CSG water.</p>	Yes

5.4.3J	<ul style="list-style-type: none"> Dust suppression measures including road watering and reduced vehicle speeds will be implemented to minimise dust deposition on foliage; 	<ol style="list-style-type: none"> Hold discussions with key stakeholders to determine if road watering and reduced vehicle speeds were implemented. Obtain evidence such as induction presentations and environmental site inspection reports to show that road watering and reduced vehicle speeds were implemented 	<p>Based on discussion with a Proponent representative, a site induction to the Proponent's Chinchilla office and a site visit conducted on 16 September 2014, dust suppression measures include:</p> <ol style="list-style-type: none"> A requirement to meet reduced vehicle speeds including a 40kmh maximum speed limit on sites and 20kmh maximum speed limit passed active machinery. This is communicated through induction and prestart meetings for each development site between the Proponent and the contractor, as well as traffic management plan submitted by the contractor as part of their approval to start once the ATW is approved. Water carts were sighted in operation during the site visit watering dusty access roads 	Yes
5.4.3K	<ul style="list-style-type: none"> Fire management measures shall take into account the need to protect remnant vegetation from frequent and hot fires. On site fire management practices shall be in accordance with Contractor HSSE requirements, relevant construction permits and method statements and appropriate dedicated fire fighting equipment will be available at high risk construction sites to manage any fires that may start up and to avoid wildfires breaking out; 	<ol style="list-style-type: none"> Obtain a copy of a fire management plan (or similar) Determine if the management plan (or similar) includes a need to protect remnant vegetation Conduct a site visit of a high fire risk site to determine if appropriate dedicated fire fighting equipment is available and observe fire management practices Obtain a copy of contract HSSE requirements, construction permits and method statements (detailing fire management practices) Determine if site fire management practices are in accordance with contractor HSSE requirements, construction permits and method statements 	<p>The Proponent's Bushfire Risk Management Plan aims to:</p> <ol style="list-style-type: none"> take all necessary steps and actions to prevent planned and unplanned bushfire ignitions that cause damage to life, property and the environment effectively contain fires with a potential to cause damage to life, property and the environment <p>In taking all necessary steps and actions to prevent planned and unplanned bushfires, the Proponent is accounting for the need to protect remnant vegetation from frequent and hot fires.</p> <p>Review of contractor EMPs include performance objectives to protect native habitat from fire'.</p> <p>A site visit was conducted on 16 September 2014 which included a visit to Berridale South wells in the Condamine State Forest, a high risk fire area. We observed a fire trailer located alongside the well area plot.</p>	Yes

5.4.3L	<ul style="list-style-type: none"> Implementation of the Gas Field Pest and Weed Management Plan to minimise the impact of weeds and feral animals on survival and reproduction of TECs; 	<ol style="list-style-type: none"> Obtain the Gas Field Pest and Weed Management Plan Obtain evidence to show that the Gas Field Pest and Weed Management Plan has been effectively implemented 	<p>The Pest and Weed Management Plan provides operational guidance and an action plan for the prevention, control and eradication of pests and weeds within the Proponent's tenement areas. Key points of the Plan include:</p> <ul style="list-style-type: none"> Pre-clearance surveys are undertaken across the gas fields to identify and record the presence of weeds and pests and discuss weed issues with landowners. Review of preclearance surveys shows this requirement has been implemented Information in the preclearance reports will then be used to develop the rules for land access and incorporated into the Proponent's Weed Database Ongoing weed surveys will be undertaken Project-specific weed management recommendations will be identified in each project's Construction Environmental Management Plan Each Proponent or contractor vehicle must have a current Weed Inspection Report or weed declaration when arriving or leaving the Proponent's property The Weed Hygiene Declaration Form should generally be used every time a thing such as a vehicle or other piece of machinery is transported to a new area or property. We reviewed site inspection forms that assess if contractors have weed declarations A company internal Weed Hygiene Inspection Report should be provided as a supplement to the Weed Hygiene Declaration Form Property Evaluation Reports (PER) have been developed for land owner consultations and weed and pest distributions and management programs are covered in these reports. <p>We tested a random sample of three requirements noting that the Proponent was able to provide satisfactory evidence in each case:</p> <ul style="list-style-type: none"> Weed Database - a screenshot of QGC's GIS system was reviewed that showed a weed location overlay constituting QGC's weed database Ongoing weed survey - a survey showing the locations of the Parthenium weed in the Forster lot was reviewed Weed inspection report - an Environmental Assessment Report was reviewed. This was performed by QGC for the Polaris lot to determine extent of Parthenium. 	Yes
--------	---	---	--	-----

5.4.3M	<ul style="list-style-type: none"> Erosion and sediment control measures will be implemented in accordance with the Erosion and Sediment Control Plan to prevent development, operational and decommissioning disturbance impacting upon hydrological regimes and water quality entering receiving environments; and 	<ol style="list-style-type: none"> Obtain the Erosion and Sediment Control Plan Obtain evidence such as site inspections to show that the Erosion and Sediment Control Plan has been implemented Conduct a site visit to determine if erosion and sediment control measures have been effectively implemented 	<p>We reviewed a copy of the Erosion and Sediment Management Plan Key requirements of the Plan are:</p> <ul style="list-style-type: none"> A site specific erosion and sediment control plans (ESCP) will be developed for high risk areas The contractor will monitor progress against the Plan via Environmental Site Walkthroughs, Weekly Environmental Inspection Checklist, Monthly Senior Management Inspections, and Hazard Observations <p>We also reviewed site inspection reports that assess if:</p> <ul style="list-style-type: none"> Controls are being used across the site eg. sedimentation fences and basins Clean water diversion is installed and effective Erosion & sediment controls are well maintained An Erosion Sediment Control Plan is in place and updated No soil or mud tracked onto public roads Any evidence of erosion from site activities and what mitigation methods are in place <p>We conducted a site visit on 16 September 2014, noting that sedimentation control measure were in place and effectively maintained, including the use of berms on exposed unsealed slopes, temporary coconut fibre logs, and geotextile netting used to stabilise slopes adjacent to watercourses.</p> <p>The Proponent provided examples of completed contractor's Weekly Environmental Inspection Checklists and a copies of contractor's Monthly Senior Management Inspections.</p>	Yes
5.4.3N	<ul style="list-style-type: none"> Should non-compliance with the mitigation measures or management strategies outlined in this SSMP occur on site an investigation shall be undertaken by all responsible parties to be followed by corrective action procedures if required. Work in the area will cease at the time of the non compliance if the incident is deemed significant by the site Environment Representative. 	<ol style="list-style-type: none"> Review a representative random sample of no less than 10% of site inspection reports where non-compliances with the SSMP were identified Obtain evidence to determine corrective actions were addressed Hold discussions with the Environment Representative to determine if a significant incident has occurred that required work to stop 	<p>Based on discussions with a Proponent representative there have been no significant incidents that have required work to stop. If for example, a Yakka Skink was spotted on site, work would cease within a 500m buffer zone and an ecological survey would be conducted to determine the habitat area in the vicinity before work could recommence. Work would only cease if there was a breach in relation to unapproved species found on site or if species were found which were not identified in the pegging party report. This occurred in Kenya East for a state list flora species that appeared following a rainfall event. In response, the Proponent ceased work and applied for a clearing permit from DERM.</p> <p>Site inspection are conducted to determine if activites are undertaken in accordance with the SSMP. Review of a sample of site inspection reports shows that the pro forma is designed to assess compliance against a number of categories including fauna and flora management. This includes, but is not limited to a determination of whether fauna spotters are present on sight, relocation activites have been carried out, site boundary is arranged to avoid disturbance to vegetation outside the boundary and appropriate protection areas are clearly flagged. We found there were no non-compliances found for the 10% sample selected.</p>	Undetermined
5.4.4 TEC Rehabilitation and Recovery				
5.4.4A.i	<p>Where progressive rehabilitation can occur of disturbance areas within the TECs, the following activities will be implemented:</p>	<ol style="list-style-type: none"> Hold discussions with key stakeholders to determine if progressive rehabilitation of disturbed areas within TECs has occurred Where progressive rehabilitation has occurred, obtain evidence to determine if the required activities of the SSMP have been met. Conduct site visits to determine if progressive rehabilitation and recovery activities have been implemented. 	<p>Based on discussions with Proponent representatives, and observations during a site visit conducted on 16 September 2014, progressive rehabilitation occurs for well pad and pipeline infrastructure. Typically the areas which allow progressive rehabilitation of TECs are located on pipeline RoWs such that the following has been implemented:</p> <ul style="list-style-type: none"> Re-establishment of natural contours and drainage lines Topsoil removed, protected during construction and reinstated during construction No burning of felled vegetation which is either respread or mulched to reduce erosion and promote revegetation 	Yes

5.4.4A.ii	• Re-establishment of natural contours and drainage lines;	As above.	We undertook a site visit on 16 September 2014 including a well pad in the Berridale South area that had been progressively rehabilitated and sites in Kenya East and Poppy where pipelines had been progressively rehabilitated. In each case, the natural contours and drainage lines were re-established.	Yes
5.4.4A.iii	• Top soil will be removed, protected and reinstated to disturbed areas; and	As above.	We undertook a site visit on 16 September 2014 including a well pad in the Berridale South area that had been progressively rehabilitated and sites in Kenya East and Poppy where pipelines had been progressively rehabilitated. Top soil is stockpiled temporarily on site, and reinstated following construction. This was observed for the well pads and pipeline infrastructure.	Yes
5.4.4A.iv	• No burning of felled vegetation. Rather, the felled vegetation will be respread to provide fauna habitat or mulched to assist in revegetation and erosion control. This will further encourage regrowth within these communities, as well as minimise weed infestations.	As above.	A Proponent representative stated that vegetation if mulched is used as erosion control or if not is stockpiled. During the site visit, no burning of felled vegetation was observed. In the progressively rehabilitated areas of the Berridale South wells, we observed that mulched vegetation had been respread in the disturbance area outside the well pad itself. We also observed vegetation was commonly stockpiled at the perimeter of the disturbance area.	Yes
5.4.5 TEC Performance Measures				
5.4.5A	Pre-clearance surveys are undertaken and all TECs identified prior to clearing by a qualified ecologist;	Refer to s5.1.4A of this document	Refer to s5.1.4A of this document	Refer to s5.1.4A of this document
5.4.5B	QGC notify DSEWPaC of any new TECs within 10 business days of identification;	1. Obtain written notification to DSEWPaC of any new TECs 2. Determine if DSEWPaC was notified within 10 business days of identifying the species in the preclearance surveys	Refer to 7.3A of the Protocol Checklist	Refer to 7.3A of the Protocol Checklist
5.4.5C	Any clearing of TECs will be authorised and recorded by the relevant statutory authority in accordance with approval conditions;	1. Hold discussions with key stakeholders to identify the relevant statutory authority in Queensland that authorises the clearing of TECs 2. Hold discussions with key stakeholders to determine the extent of clearing of TECs 3. Obtain authorisation from the statutory authority for clearances to TECs	Refer to 5.6.2.J.i of this work paper.	Refer to 5.6.2.J.i of this work paper.
5.4.5D	Any clearing of TECs will be offset in accordance with the Offset Plan;	1. Obtain a copy of QGC's Offset Plan 2. Determine if clearing of TECs have been offset in accordance with the Offset Plan	Refer to 26.3a of the Audit Criteria & Methodology	Refer to 26.3a of the Audit Criteria & Methodology
5.4.5E	Any reporting requirements as indicated in the Approvals documentation shall be in accordance with specified timelines;	Refer to Audit Criteria and Methodology s5.7 and 5.8	Refer to Audit Criteria and Methodology s5.7 and 5.8	Refer to Audit Criteria and Methodology s5.7 and 5.8
5.4.5F	No clearing of TECs outside the designated clearing boundaries.	1. Hold discussions with key stakeholders to determine how it is ensured that no clearing of TECs occurs outside the designated clearing boundaries 2. Review evidence to determine if clearing has occurred outside the designated clearing boundaries	Refer to 5.4.3B of this document	Refer to 5.4.3B of this document

5.4.6 TEC Monitoring				
5.4.6A	Monitoring of TEC regeneration will be undertaken in accordance with the RRRMP	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to identify QGC's approach to monitoring TEC regeneration 2. Obtain the RRRMP 3. Determine if QGC's approach to offset monitoring is in accordance with the SSMP and OMP 	Based on discussions with a Proponent representative, monitoring of TEC regeneration is not applicable since no infrastructure has been decommissioned to date (as of mid September 2014) since it is only three years old. This is aligned with the understanding that infrastructure has a design life of 20-30 years and commenced from 2011.	NA
5.6.1 Identification of Threatened Flora Species				
5.6.1A	<p>A pre-clearance survey will be undertaken of each planned infrastructure area (also known as a pegging party) by a qualified ecologist to identify the presence / absence of Threatened flora species.</p> <p>Constraint mapping will be utilised to assist in identifying the potential presence of flora species as it will include known species records, results of previous pre-clearance surveys and regional ecosystem mapping.</p>	<ol style="list-style-type: none"> 1. Obtain evidence that a pegging party has taken place for each planned infrastructure area 2. Review attendance records (where available) or other evidence, to determine if the pegging party was undertaken by a qualified ecologist 	<p>To review if pegging party's were taken place for each planned infrastructure area, refer to 3.2.4A of the Protocol Checklist.</p> <p>To review if a qualified ecologist undertook the preclearance survey, refer to 6.1D of the Protocol Checklist.</p>	<p>To review if pegging party's were taken place for each planned infrastructure area, refer to 3.2.4A of the Protocol Checklist</p> <p>To review if a qualified ecologist undertook the preclearance survey, refer to 6.1D of the Protocol Checklist</p>
5.6.2 Threatened Flora Standard Mitigation Measures				
5.6.2A	<p>Mitigation measures to minimise Project impacts on Threatened flora are:</p> <ul style="list-style-type: none"> • As part of routine pre-start meetings, work crews will be briefed on any known and potential environmental constraints occurring in that work location, including any likely significant flora and fauna species, populations and TEC they may encounter 	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of site specific inductions or tool box talks provided to site personnel prior to work commencing 2. Determine if they include environmental constraints such as significant flora and fauna species, populations and TECs 	Refer to 5.4.3A of this document	Refer to 5.4.3A of this document
5.6.2B	<ul style="list-style-type: none"> • Prior to clearing, limits of clearing areas including "no go" zones, will be clearly marked out with appropriate flagging material and/or barricade webbing as determined by the site Field Environment Officer 	<ol style="list-style-type: none"> 1. Obtain evidence of clearly marked clearing areas such as site inspection reports including photos of such areas 2. If unavailable, hold discussions with the Field Environment Officer to determine if any areas are due to be cleared 3. If areas are due to be cleared, undertake a site visit to determine if areas to be cleared are appropriately marked 	Refer to 5.4.3B of this document	Refer to 5.4.3B of this document
5.6.2C	<ul style="list-style-type: none"> • Cleared vegetation will not be pushed into adjacent vegetated areas or other environmentally sensitive areas such as waterways and gullies. 	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to identify how cleared vegetation is disposed 2. Conduct a site visit to determine if cleared vegetation has been pushed into adjacent vegetated areas, waterways or gullies 3. If vegetation has not been recently cleared at the time of the site visit, obtain other evidence such as site inspection reports showing how vegetation was cleared 	See section 5.4.3F of this document	See section 5.4.3F of this document

5.6.2D	Vehicle activities will be restricted to roads, access tracks and hardened surfaces wherever possible to reduce the possibility of wildfire, spread of weeds and any potential impact on significant or other species	Conduct a site visit to determine if vehicle use is restricted to roads, access tracks and hardened surfaces	Refer to 6.4.3G of this document	Refer to 6.4.3G of this document
5.6.2E	• Dust suppression measures including road watering and reduced vehicle speeds will be implemented to minimise dust deposition on foliage	1. Hold discussions with key stakeholders to determine if road watering and reduced vehicle speeds were implemented. 2. Obtain evidence such as induction presentations and environmental site inspection reports to show that road watering and reduced vehicle speeds were implemented	See section 5.4.3J of this document	See section 5.4.3J of this document
5.6.2F	• Fire management measures shall take into account the need to protect remnant vegetation and EVNT flora species from frequent and hot fires. On site fire management practices shall be in accordance with Contractor HSSE requirements, relevant construction permits and method statements and appropriate dedicated fire fighting equipment will be available at high risk construction sites to manage any fires that may start up and to avoid wildfires breaking out	1. Obtain a copy of a fire management plan (or similar) 2. Determine if the management plan (or similar) includes a need to protect remnant vegetation 3. Conduct a site visit of a high fire risk site to determine if appropriate dedicated fire fighting equipment is available and observe fire management practices 4. Obtain a copy of contract HSSE requirements, construction permits and method statements (detailing fire management practices) 5. Determine if site fire management practices are in accordance with contractor HSSE requirements, construction permits and method statements	See section 5.4.3K of this document	See section 5.4.3K of this document
5.6.2G	• Implementation of the Gas Field Pest and Weed Management Plan to minimise the impact of weeds on survival and reproduction of Threatened flora	1. Obtain the Gas Field Pest and Weed Management Plan 2. Obtain evidence to demonstrate that the Gas Field Pest and Weed Management Plan has been effectively implemented to minimise the impact of weeds on survival and reproduction of Threatened flora	Refer to 5.4.3L of this document	Refer to 5.4.3L of this document
5.6.2H.i	• If a Threatened flora species is found within the proposed clearance area, the following additional measures will be implemented:			

5.6.2H.ii	- Notify the QCLNG and Contractor Environment Managers;	<p>1. Hold discussions with key stakeholders to determine if a threatened flora species was found in any clearance areas</p> <p>2. If threatened species have been found in proposed clearance areas, obtain evidence to determine if the requirements of the SSMP have been met</p>	<p>Based on discussions with a Proponent representative, any threatened flora species are found within the clearance area would be identified by the contractor Environment team who conduct site walkthroughs of the area before each work pack is commenced. If identified, they would call a Proponent representative or the Manager Land & Environment Field Services.</p> <p>We held discussions with a Proponent representative who is Manager Land & Environment Field Services 'back to back' undertaking the role when she is unavailable. Manager Land & Environment Field Services would be informed if a threatened flora species was found in the proposed clearance area.</p> <p>We reviewed an email dated 20 April 2013 to the previous Manager Land & Environment Field Services informing him that a population of Eleocharis blakeana, a NC Act Near Threatened flora species that had not been accounted for during the preclearance survey.</p>	Yes
5.6.2H.iii	- Where possible, relocate site infrastructure to avoid Threatened flora;	<p>1. Hold discussions with key stakeholders to determine if a threatened flora species was found in any clearance areas</p> <p>2. If threatened species have been found in proposed clearance areas, obtain evidence to determine if the requirements of the SSMP have been met</p>	<p>Based on discussions with a Proponent representative, the Proponent adopts a policy to avoid areas that will impact on threatened flora which is implemented via the pegging party survey that identifies and agrees changes to conceptual layout of infrastructure as a result of identifying threatened flora and other sensitive receptors in the proposed development area.</p> <p>Review of preclearance surveys evidences that where possible, site infrastructure is routinely relocated to avoid threatened flora.</p>	Yes
5.6.2H.iv	- Tag individuals and/or barricade the area off in an appropriate manner as specified by the site Environment Representative following the principles of the Australian Standard (AS) 4970-2009 Protection of Trees on Development Sites;	<p>1. Hold discussions with key stakeholders to determine if a threatened flora species was found in any clearance areas</p> <p>2. If threatened species have been found in proposed clearance areas, obtain evidence to determine if the requirements of the SSMP have been met</p>	Refer to s5.4.3B of this document	Refer to s5.4.3B of this document
5.6.2H.v	- Record the GPS location of Threatened flora individuals and incorporate them into the Environmental Constraint Mapping;	<p>1. Hold discussions with key stakeholders to determine if a threatened flora species was found in any clearance areas</p> <p>2. If threatened species have been found in proposed clearance areas, obtain evidence to determine if the requirements of the SSMP have been met</p>	Refer to s1.8E of this document	Refer to s1.8E of this document

5.6.2H.vi	<p>- Continuation of clearing works at the site of the identified Threatened flora shall depend on the location and scale of the plants in respect to the clearance area and if it is possible for clearance to continue in a manner which complies with the principles of AS 4970-2009 Protection of Trees on Development Sites. If advised by the site Environment Representative that a suitable level of protection can be afforded to Threatened flora then clearance can continue around this area. Otherwise clearance works are to skip ahead as far as deemed necessary by the site Environment Representative to ensure protection of Threatened flora; and</p>	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to determine if a threatened flora species was found in any clearance areas 2. If threatened species have been found in proposed clearance areas, obtain evidence to determine if the requirements of the SSMP have been met 	<p>Based on discussions with a Proponent representative and observations during the site visit conducted on 16 September 2014 including observations of precleared and recently cleared vegetation, the tree protection principles of AS 4970-2009 are adhered to. The Proponent's process includes:</p> <ol style="list-style-type: none"> 1. Undertake preclearance survey (pegging party) with qualified ecologist and surveyor to ground truth the desk based assessment detailed in the PACR 2. The contractor develops an Environmental Control Plan (ECP) based on the Access To Work (ATW) document that incorporates the pegging party report and approved final layout. The ECP identifies areas of sensitive species and management and mitigation responses including any clearing permits required, marking of clearing areas, mulching requirements, watercourses present 3. Following the preclearance survey, a risk assessment is conducted involving preclearance talks between the contractor and fauna spotters. The RA identifies any items to be retained such as habitat trees. 3. Fauna spotters (qualified ecologists) are in attendance during the clearing phase 4. Site environment team conduct inspections against the requirements of the ECP 	Yes
5.6.2H.vii	<p>- If clearing of Threatened flora is determined to be unavoidable the Standard Management Procedures outlined in Section 5.1 of this SSMP shall be followed</p>	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to determine if a threatened flora species was found in any clearance areas 2. If threatened species have been found in proposed clearance areas, obtain evidence to determine if the requirements of the SSMP have been met 	Refer s5.1 of this document	Refer s5.1 of this document
5.6.2I	<p>• Should non-compliance with the mitigation measures or management strategies outlined in this SSMP occur on site an investigation shall be undertaken by all responsible parties to be followed by corrective action procedures if required. Work in the area will cease at the time of the non compliance if the incident is deemed significant by the site Environment Representative</p>	<ol style="list-style-type: none"> 1. Review a representative random sample of no less than 10% of site inspection reports where non-compliances with the SSMP were identified 2. Obtain evidence to determine corrective actions were addressed 3. Hold discussions with the Environment Representative to determine if a significant incident has occurred that required work to stop 	Refer to section 5.4.3N in this document	Refer to section 5.4.3N in this document
5.6.2J.i	<p>• As detailed in Section 5.1 if disturbance is un-avoidable, a clearing permit from DERM will be required; and</p>	<p>For those TECs and EVNT flora species that are confirmed during pre-clearance surveys and disturbance is unavoidable:</p> <ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to determine if QGC have applied for and retain clearing permits from DERM 2. Review a representative random sample of no less than 10% of clearing permits from DERM 	<p>Based on discussions with a Proponent representative, the Proponent has applied for clearing permits for <i>Philothea sporadica</i> (both Commonwealth and DEHP protected) in instances where disturbance was unavoidable.</p> <p>Review of a sample of clearing permits showed they were addressed to the Proponent from the Department of Environment and Heritage Protection and related to the approval of a clearing permit application made under the Nature Conservation (Administration) Regulation 2006.</p>	Yes

5.6.2J.ii	- A propagation and rehabilitation program/management plan will be developed for any individuals of threatened flora which cannot be avoided and that have been identified as able to be translocated (propagation by seed or cutting and planting in rehabilitation areas adjacent to removal site) prior to construction activities. This plan will be developed in accordance with the Guidelines for Translocation of Threatened Species in Australia (Vallee et al. 2004);	3. Obtain a sample of propagation and rehabilitation management plans 4. Review the propagation and rehabilitation management plans to determine if they have been developed in accordance with the Guidelines for Translocation of Threatened Species in Australia	The Philotheca sporadica Translocation and Implementation Management Plan states that it has been developed consistent with the Vallee et al. 2004 guideline document. There are also multiple references to the Vallee et al. 2004 guidelines regarding the design of translocation exercises, maintenance programs.	Yes
5.6.2J.iii	- The handling of flora specimens (seeds, cuttings or other propagules) will be undertaken in accordance with Vallee et al. (2004) (the use of fungicides for seed storage, keeping cutting and other propagules moist during translocation practices) to ensure their survival as far as practicable;	5. Obtain evidence to determine if the handling of flora specimens was undertaken in accordance with Vallee et al. (2004)	Review of Philotheca sporadica Population Genetics & Propagation report prepared by University of the Sunshine Coast for the Proponent did not reference methodology being in accordance with Vallee et al. (2004)	Undetermined
5.6.2J.iv	- Seeds or cuttings of threatened flora to be translocated will be collected prior to construction in accordance with guidelines contained within the RRRMP; and	6. Obtain evidence to show that flora specimens have been collected prior to construction and in accordance with the RRRMP	Philotheca sporadica Population Genetics & Propagation report prepared by University of the Sunshine Coast for the Proponent describes the method and results of translocating seeds and cuttings of Philotheca. The RRRMP requires that 'translocation, propagation and replanting of MNES and EVNT flora species will be undertaken where established to be effective for that particular species, and identified in the relevant Significant Species Management Plan'. The report makes due consideration of the suitability of the potential offset site and potential habitat for the species.	Yes
5.6.2J.v	- If required offsets will be included within the Project's offset program	7. Obtain evidence that offsets were not required (or, if required, have been added to the offset requirement).	Review of the Offset Plan notes that the Proponent have identified preliminary offset sites but have yet to commence site verification and selection, property acquisition and offset site establishment phases. Review of the Proponent's Offset Plan shows that offsets are included in the offset program where required. It is understood that the Offsets Plan has been sent to the Department for approval and is awaiting endorsement. No offsets have occurred to date (as of December 2014).	NA
5.6.3 Threatened Flora Rehabilitation and Recovery				
5.6.3A	Where species are not known to occur within the Project footprint, habitat recovery at this stage will consist of stabilising rehabilitation works; natural re-vegetation of remnant species so that the site will return as much as practicable to the floristic composition and density of the pre-clearance ecosystem; and control of weeds and erosion at all Project disturbance sites. Further detail on progressive rehabilitation is provided in the Gas Field RRRMP	1. Where threatened flora species do not occur, hold discussions with key stakeholders to determine QGC's approach to habitat recovery 2. Obtain evidence of QGC's habitat recovery approach for areas where threatened flora species do not occur and determine if the approach is in accordance with the SSMP requirements	Based on discussions with a Proponent representative, the majority of land use where threatened flora species do not occur is grazing and planted woodland for timber. In these cases, the Proponent seeks to return to the land use to the original condition. For example, for grazing areas, the Proponent recovers the area as required by the SSMP, namely re-establishing the natural contours and drainage lines, and reinstating top soil where the landholder is not seeking for the site to be cleared. For wooded areas, the Proponent focusses on re-establishing contours following construction as well as weed control and reinstating the top soil which contains natural seed stock for re-establishing the woodland habitat. This process is monitored through site inspections conducted by the FEOs who would document any issues in relation to erosion or weed control for example. We reviewed examples of Environmental Inspection Forms where threatened flora species are not known to occur and noted the assessment of vegetation structure, species richness, percentage foliage cover in rehabilitated areas, habitat values, declared weed cover and checks relating to erosion and water management. This is in accordance with the SSMP requirements	Yes

5.6.3B.i	If a Threatened Flora species is identified and clearing is determined to be unavoidable:	Where threatened flora species do occur and clearing is unavoidable, obtain the revised version of the specific Flora SMP		
5.6.3B.ii	• Any adjacent populations will not be disturbed;	Refer to s5.6.4C of this document	Refer to s5.6.4C of this document	Refer to s5.6.4C of this document
5.6.3B.iii	• Any clearing will be authorised by the relevant statutory authority in accordance with approval conditions;	Refer to s5.6.4A of this document	Refer to s5.6.4A of this document	Refer to s5.6.4A of this document
5.6.3B.iv	• A species specific rehabilitation proposal will be included in a revised version of the specific Flora SMP; and	2. Determine if the specific Flora SMP includes a species specific rehabilitation proposal	Based on discussions with Proponent representatives, no revision to flora SMPs has occurred.	NA
5.6.3B.v	• Offsets will be provided for the impacted plants, if applicable	Refer to s5.6.4C of this document	Refer to s5.6.4C of this document	Refer to s5.6.4C of this document
5.6.4 Threatened Flora Performance Measures				
5.6.4A	Any clearing of Threatened flora will be authorised by the relevant statutory authority in accordance with approval conditions.	1. Hold discussions with key stakeholders to identify the relevant statutory authority in Queensland that authorises the clearing of threatened flora 2. Hold discussions with key stakeholders to determine the extent of clearing of threatened flora 3. Review a representative random sample of no less than 10% of authorisations from the statutory authority for clearances to threatened flora	Refer to 5.6.2.J.i of this work paper.	Refer to 5.6.2.J.i of this work paper.
5.6.4B	A pre-clearance survey is undertaken to identify the presence / absence of Threatened flora.	Refer to s5.1.2D of this document	Refer to s5.1.2D of this document	Refer to s5.1.2D of this document
5.6.4C	Should impacts to the species occur, any adjacent populations will not be disturbed and an offset will be provided for the impacted plants, if applicable.	1. Hold discussions with stakeholders to determine how it is ensured that adjacent populations are not disturbed 2. Obtain evidence to show that adjacent populations were not disturbed 3. Obtain a copy of QGC's Offsets Strategy 4. Determine when an offset is applicable 5. Hold discussions with key stakeholders to determine if an offset was provided 6. Obtain evidence to determine if an offset was correctly provided where applicable	Regarding protection of threatened flora from disturbance, refer to 5.1.3B of this document Regarding applicability of offsets, refer to 5.6.2.j.v of this document	Regarding protection of threatened flora from disturbance, refer to 5.1.3B of this document Regarding applicability of offsets, refer to 5.6.2.j.v of this document
5.6.5 Threatened Flora Monitoring				
5.6.5A	An appropriate monitoring program, incorporating the monitoring of any offset site, if applicable, will be established in conjunction with the relevant authority once any impact to a Threatened flora species is identified	1. Obtain evidence that a monitoring program has been established for threatened flora species 2. Determine if the monitoring program incorporates the monitoring of offset sites (if applicable) and has been established in conjunction with the relevant authority.	With regard to establishing a monitoring program for threatened flora, the Proponent has implemented a monitoring program for translocated <i>Philotheca sporadica</i> . Based on discussions with a Proponent representative, we understand no other threatened flora has been translocated. With regard to offsets, the Proponent has identified preliminary offset sites but have yet to commence site verification and selection, property acquisition and offset site establishment phases. As a result monitoring offset sites is not applicable.	Yes

5.6.5B	Monitoring of translocation and /or propagated transplant sites will be undertaken at specified intervals for the first year and then annually thereafter for a period of 5 years following translocation (Table 11 on page 54 of Revision 2 of the SSMP, October 2011). It is anticipated that the majority of mortalities will occur following initial transplanting, and that once established, climatic factors will then be influence for any further declines	Obtain evidence to show that monitoring of translocation and / or propagated transplant sites has occurred at specified intervals for the first year and annually thereafter	<p>We reviewed documentation describing the Proponent's work to propagate and translocated Kogan Wax Flower to an identified location. The document states that monitoring the survival of the plants will occur fortnightly for the first month then quarterly for the first year then annually for the next two years.</p> <p>We also reviewed documentation from 2014 stating that translocation planting occurred from 24-27 September 2013 followed by replanting of deceased stock on three occasions in October 2013. This satisfies the planned requirement to 'monitor the survival of plants fortnightly for the first month'.</p> <p>Monitoring events then occurred in late November 2013 and June 2014 at which point survival was at 4% and the trial was discontinued. This is not aligned with the planned requirement to monitor survival on a quarterly basis for the first year.</p>	No
5.6.5C.i	The criteria for success as determined by the monitoring program will be based upon the following short and long term goals as detailed below (Vallee et al. 2004):	<ol style="list-style-type: none"> 1. Obtain evidence that a monitoring program has been established for threatened flora species 2. Determine if the monitoring program incorporates the criteria for success as detailed in the SSMP. 		
5.6.5C.ii	<p>Short Term Criteria</p> <ul style="list-style-type: none"> • Greater than 70% of transplants are surviving, from the range of genetic representative used; • The new or enhanced populations have characteristics (survival and growth) similar to the natural populations; • Survival of plants to reproductive age; • The reproduction of transplanted individuals including flowering, fruiting and the setting of viable seed. 	<ol style="list-style-type: none"> 3. Determine if the monitoring program is achieving the short term goals as detailed in the SSMP. 4. Obtain evidence to confirm the achievement of the short term criteria 	<p>Deloitte to update this finding as follows:</p> <p>The Proponent's Philotheca sporadica Translocation and Implementation Management Plan June 2013 states that translocation monitoring results will be assessed against the following short term criteria:</p> <ul style="list-style-type: none"> • > 70% of translocated plants are surviving at each monitoring interval • Plant growth characteristics and phases reflect natural populations • >60% of translocated plants reach reproductive maturity <p>Review of a briefing document demonstrates that surveys undertaken by the ecologist after planting found a survival rate of 18% of Philotheca sporadica. As a result, the first of the short term criteria was not met. Evidence was not available to support the achievement of the remaining short term criteria since the plants did not meet the first criterion. Therefore, achievement of the remaining short term criteria is not relevant.</p>	NA
5.6.5C.iii	<p>Long Term Criteria</p> <ul style="list-style-type: none"> • New seedlings are produced; • The number of individuals within the original transplant program is sustained or is increasing through natural processes; • Biodiversity is maintained through successive generations 	<ol style="list-style-type: none"> 5. Determine if the monitoring program is achieving the long term goals as detailed in the SSMP (if applicable at the time of audit) 6. Obtain evidence to confirm the achievement of the long term criteria (if applicable at the time of audit) 	<p>The Proponent's Philotheca sporadica Translocation and Implementation Management Plan states that translocation monitoring results will be assessed against the following short term criteria:</p> <ul style="list-style-type: none"> • New P. sporadica seedlings are present at translocation sites • >60% of translocated and established plants remain present • P. sporadica plants become established in areas adjoining translocation sites <p>Whilst the criteria specified in the SSMP are not represented in the management plan, review of a briefing document demonstrates that the short term criterion to obtain a 70% survival rate was not met (see 5.6.5C.ii). Therefore, evidence was not available to confirm the achievement of subsequent long term criteria since these are not applicable.</p>	NA
5.7.1 Identification of Threatened Fauna Species				

5.7.1A	Known records of Threatened fauna species, Essential Habitat mapped by DERM and results from previous pre-clearance surveys within the Gas Field will be included into the QGC constraint mapping under the Protocol which informs the location of infrastructure to avoid these areas where possible	1. Review a representative random sample of no less than 10% of records relating to known threatened fauna species, Essential Habitats mapped by DERM and pre-clearance surveys 2. Obtain the QGC constraint mapping 3. Determine if the information in the samples is included in the QGC constraints mapping	We obtained a walkthrough of the Proponent's GIS system, Map Magic with GIS specialists. We observed that the ecological survey layer was updated with instances of threatened flora and fauna locations identified from pre-clearance surveys. Comparison of this layer to other ecological datasets obtained from third party sources including the DERM Essential Habitat dataset and DEHP Regional Ecosystem dataset (including threatened fauna), acts as a method to ground truth the desktop data. Furthermore, we confirmed that constraints maps were updated with threatened fauna species and essential habitat by sighting the latest essential habitat dataset from DERM and threatened fauna data from BAMB in the Proponent's GIS system (refer to 5.2.1D).	Yes
5.7.1B	Consistent with the Protocol, pre-clearance surveys of all areas proposed for infrastructure, will be undertaken by a DSEWPaC approved ecologist	Refer to Protocol Checklist s6.1D	Refer to Protocol Checklist s6.1D	Refer to Protocol Checklist s6.1D
5.7.1C	The first environmental pre-clearance survey will be undertaken as part of a 'pegging party' that includes multiple assessments for environmental, engineering, land access, cultural heritage, drilling and subsurface. The intent of the pegging party is to reach agreement across all disciplines where the final location of infrastructure will be placed on the site. If agreement cannot be reached the matter will be referred to the Project Engineer/Manager and it may be necessary to arrange a second pegging party; and	Refer to Protocol Checklist s3.2.4A	Refer to Protocol Checklist s3.2.4A	Refer to Protocol Checklist s3.2.4A
5.7.1D	The pre-clearance surveys will be undertaken prior to any vegetation clearing or disturbance occurring on the site	Refer to s5.1.2C of this document	Refer to s5.1.2C of this document	Refer to s5.1.2C of this document
5.7.1E	Pre-clearance surveys will include a walk through of the entire proposed disturbance area and targeted assessment for the presence of EVNT flora species and habitats for EVNT fauna species. The aim is to identify and record any environmental constraints in the proposed development area including TECs, EVNT flora species, watercourses, wetlands and assess the required buffer distances to these values (as specified in the Protocol);	Refer to s5.1.2D of this document	Refer to s5.1.2D of this document	Refer to s5.1.2D of this document
5.7.1F	A targeted fauna habitat assessment will also be undertaken where values are high. Where a threatened fauna species and/or its habitat is noted as occurring, or likely to occur, and QGC cannot avoid disturbing the area, the ecologist will advise QGC to commission a more detailed survey in accordance with the relevant DSEWPaC Guidelines;	Refer to s5.1.2E of this document	Refer to s5.1.2E of this document	Refer to s5.1.2E of this document
5.7.1G	The second round of pre-clearance surveys will be carried out to validate the presence of EVNT fauna species and their habitats.	1. Review a representative random sample of no less than 10% of second round pre-clearance surveys 2. Review the second round pre-clearance surveys to determine if they validate the presence of EVNT fauna species and their habitats	The pre-clearance survey methodology involves a walk through of the proposed disturbance area. If EVNT fauna species and their habitats are identified, a second round pre-clearance survey is undertaken. These include surveys such as targeted fauna surveys, habitat surveys and quantification surveys. For example, a survey entitled Threatened Fauna Species Survey – Condamine State Forest (Berwyndale South Portion) confirmed that suitable habitat is provided for the Brigalow Scaly Foot and the presence of eastern long-eared bat.	Yes

5.7.1H	These surveys will be undertaken in accordance with the applicable DSEWPaC Survey Guidelines (relevant to the likely MNES fauna species present) in place at the time of survey.	Refer to s5.1.2F of this document	Refer to s5.1.2F of this document	Refer to s5.1.2F of this document
5.7.1I	For each location selected for infrastructure, a report will be generated for all constraints at that location and records maintained for the reasons for selection of that location. In particular where no go, high or very high constraint areas are selected	Refer to Protocol Checklist s4.1A	Refer to Protocol Checklist s4.1A	Refer to Protocol Checklist s4.1A
5.7.1J	The pre-clearance survey report for the proposed infrastructure will be prepared by the ecologist/s that undertook the surveys and will include recommendations as to the avoidance and mitigation measures to be adopted, and whether a spotter-catcher is required to be present during clearing to ensure injury or death to fauna species is avoided and minimised. Examples include trees with hollows, fallen timber and leaf litter that may be habitat for ground dwelling animals or habitats for aquatic animal species such as gilgais	Refer to s5.1.2H of this document	Refer to s5.1.2H of this document	Refer to s5.1.2H of this document
5.7.1K	Where environmental constraints dictate that there is not a suitable location within the chosen property, then an alternative location will be considered if available; and	Refer to s5.1.2I of this document	Refer to s5.1.2I of this document	Refer to s5.1.2I of this document
5.7.1L	The final determination for the location of infrastructure will be by a formal process as documented in the Protocol	Refer to Protocol Checklist s4.0	Refer to Protocol Checklist s4.0	Refer to Protocol Checklist s4.0

Appendix 3: Constraints Planning and Field Development Protocol Checklist

Ref	Protocol Requirement	Evidence	Independent Auditor Comments	Implemented?
2.1 Scope				
2.1A	The Constraints Planning and Field Development Protocol (the Protocol) applies for the life of the project.	Refer to section 4.1 of the Audit Criteria and Methodology	Refer to section 4.1 of the Audit Criteria and Methodology	Refer to section 4.1 of the Audit Criteria and Methodology
2.1B	The protocol and related plans will be reviewed and updated at least annually	<ol style="list-style-type: none"> 1. Obtain a copy of the Protocol, the Significant Species Management Plan (SSMP) and the Remediation, Rehabilitation, Recovery and Monitoring Plan (RRRMP) 2. Review the documents to determine if they have been updated at least annually 	<p>The Protocol was first issued in March 2011 (Rev 0). The current version (Rev 3) was issued in October 2011.</p> <p>The SSMP was first issued in June 2011 (Rev 0). The current version (Rev 2) was issued in October 2011.</p> <p>The RRRMP was first issued in April 2011 (Rev 0). The current version (Rev 2) was issued in October 2011.</p> <p>The related plans have not been reviewed and updated at least annually since there is a conflicting requirement given that the plans themselves specify a requirement to be updated every 5 years.</p> <p>The protocol has not been reviewed and updated at least annually.</p> <p>Improvement opportunity: consider updating wording in the Protocol to align the review requirement of 'related plan' to the 5 year review requirement of the SSMP and RRRMP.</p>	No
2.1C	The protocol and related plans will be reviewed and updated to take into account the findings of the Cumulative Impact Assessment Report required by the Queensland Government; before each major stage of gas field development; or following a written request from DSEWPac.	Refer to section 21.1 of the Audit Criteria and Methodology	Refer to section 21.1 of the Audit Criteria and Methodology	Refer to section 21.1 of the Audit Criteria and Methodology
2.1D	The Protocol will be reviewed in conjunction with the SSMP and RRRMP.	<ol style="list-style-type: none"> 1. Obtain a copy of the Protocol, SSMP and RRRMP 2. Review document control information to determine if the Protocol has been reviewed in conjunction with the plans 	The current versions of the Protocol, SSMP and RRRMP are dated October 2011. This is aligned with the Protocol version date, indicating they were reviewed in parallel.	Yes
2.1E	The Protocol must be approved in writing by the Minister for Sustainability, Environment, Water, Population and Communities prior to commencement of gas field activities (Condition 20)	<ol style="list-style-type: none"> 1. Obtain evidence of written approval of the Protocol by the Minister 2. Obtain documentation to evidence commencement of gas field activities 3. Review evidence to determine if gas field activities commenced before or after Approval by the Minister 	<p>A letter from a senior Proponent representative to the Assistant Secretary, DSEWPac confirms the commencement of gas field activities occurred on 22 October 2011.</p> <p>A letter from the Assistant Secretary, DSEWPac to a senior Proponent representative dated 21 October 2011 confirms approval for the QLNG Gasfields Protocol</p> <p>The Protocol was therefore approved in writing prior to the commencement of gas field activities.</p>	Yes
2.1F	As required by condition 4, the Protocol includes the principles of: 1) avoiding direct and indirect adverse impacts on MNES; 2) mitigating and managing direct and indirect impacts to minimise cumulative adverse impacts on MNES. The Protocol is applied in conjunction with the SSMP and RRRMP which address minimisation of adverse impacts on MNES; 3) active site remediation and rehabilitation of impacted areas to promote and maintain long-term recovery of MNES.	Review the Protocol to determine if it includes/addresses all of the principles required by the condition	Section 2.1 ('Scope') of the Protocol includes the principles stated by the EPBC requirement.	Yes
2.1G	The Protocol must be reviewed by the CG prior to the issue of Environmental Authorities (EAs)	<ol style="list-style-type: none"> 1. Obtain evidence to show the date of review by the Coordinator General 2. Obtain evidence to determine the date the Protocol was issued to the Environmental Authorities 	<p>We reviewed a letter from the Deputy Coordinator General to a senior Proponent representative dated 6 June 2011 stating that the draft Protocol was initially provided to the CG office for review on 15 September 2010 and a revised version submitted on 20 May 2011. The letter provides approval of the revised version of the Protocol.</p> <p>All relevant Environmental Authorities were reviewed. In every case the Protocol was reviewed by the CG prior to issue of the EAs.</p>	Yes

2.2 Area Covered by the Protocol				
2.2A	Should development plans change during the first major stage of development, QGC will update the maps of proposed development blocks and proposed major infrastructure accordingly.	1. Hold discussions with stakeholders to determine if development plans have changed 2. Obtain maps of proposed development blocks and proposed major infrastructure to determine if they have been updated in response to any development plan changes	Based on discussions with Proponent representatives, QGC there have been no changes to development plans during the first major stage of development at tenure or QCLNG level that are outside the area covered by the existing protocol.	Yes
2.3 Objective of Constraints Mapping				
2.3A	To support bioregional corridors, QGC shall identify important bioregional corridors (e.g. those identified in the Brigalow Belt Biodiversity Planning Assessment prepared in accordance with the Biodiversity Assessment and Mapping Methodology). These corridors are in a high constraint category.	1. Hold discussions with stakeholders to determine if important bioregional corridors were identified 2. Obtain evidence to determine which constraint category the important bioregional corridors are in	During a walkthrough of QGC's GIS system, we sighted the constraint requirements for Biodiversity Assessment Mapping Methodology (BAMM) biodiversity corridors noting that it is ranked as 'High'. No other important bioregional corridors exist in CROME (the constraint ranking software in the GIS system).	Yes
2.3B	Infrastructure planning and placement shall follow criteria which will minimize potential impacts to these bioregional corridors including the avoidance and reduction of fragmenting large, contiguous tracts or corridors of habitat which support threatened species, habitat or communities.	1. Review infrastructure planning and location criteria 2. Review evidence to determine if the criteria align with the requirements of the condition	Infrastructure planning and location criteria is outlined in the Protocol and Survey Guideline. QGC employs an "avoid, minimise, mitigate" approach to location development as outlined in the Proponent's Survey Guideline and details specific criteria for the location of infrastructure within or near to environmental constraints. This approach applies to all areas of development including bioregional corridors. The Proponent has developed the CROME GIS engine that ranks constraints in accordance with the rankings set in the Protocol. This engine forms the guideline for conceptual layout design, with key other criteria managing landholder requirements, engineering specifics etc. In regards to fragmentation, section 3.5 of the QGC's Environmental Field Constraints Assessment Guideline states that 'fragmentation of significant tracts of vegetation should be avoided or minimised'. The Proponent seeks to avoid small to medium patches of vegetation and seeks to route around them and develop along landholders boundaries, utilising existing firebreaks and land holder access tracks where possible. However, some large vegetation tracts including those along watercourses cannot be avoided by all linear infrastructure. In these instances, QGC seeks to collocate pipelines and access tracks and utilise areas of pre-existing disturbance/clearing where possible. Via the methods described above, the Proponent's infrastructure planning and placement follow the criteria to minimise potential impacts to MNES.	Yes
2.3C	Where practical, infrastructure or facilities will be placed on lands already altered, cultivated, disturbed and away from areas of intact and healthy native habitats. If not practical, fragmented, degraded or regrowth habitats will be selected over relatively intact corridors.	Review planning and location criteria to determine if it selects lands in line with the hierarchy specified in the condition	Infrastructure planning and location criteria is outlined in the Protocol and Survey Guideline. The guideline states that 'the pegging party should seek to utilise existing clearings or areas of disturbance where possible e.g. existing tracks, easements etc'.	Yes

2.3.1 Matters of National Environmental Significance and Environmentally Sensitive Areas				
2.3.1A	The Protocol will assign a constraints ranking to Matters of National Environmental Significance (MNES) and Environmentally Sensitive Areas (ESAs). MNES will be a "no go" or very high constraint whilst ESAs may be very high, high or medium constraints. Thus the principle of avoiding direct and indirect adverse impacts on MNES and ESAs is incorporated into the Protocol.	Review evidence to determine if MNES and ESA have been assigned a constraints ranking in accordance with the Protocol	We held discussions with a Proponent representative and conducted a walkthrough of the QGC's GIS system noting that MNES and ESAs were assigned a constraint ranking in line with the Protocol requirement. We also cross referenced the constraint rankings per infrastructure type listed in Appendix A of the Protocol (which are subsequently loaded into the GIS system), noting instances where MNES were not ranked in accordance with the Protocol Requirement. We investigated these instances as follows, with no exceptions noted: 1. Some ESA types are ranked as No Go which is not in line with the 'very high', 'high' or 'medium' ranking in the Protocol. Justification: these ESAs have a higher rank under the Environmental Authority issued by the State. This high rank supercedes the lower ranking required by the Protocol. 2. Some ESA's such as International Agreement Area and Wilderness Area are not listed in the Protocol Appendix A. Justification: the EIS determined that they were not present in QGC's project area and so they are cited in Protocol 3. Some MNES types are listed as 'High' for some certain types of infrastructure; for example, World Heritage Areas SPZ for pipeline infrastructure, and RAMSAR Sites SPZ for pipeline infrastructure. Justification: the Secondary Protection Zone (SPZ) is an area with a radius 200m outside the MNES. In any case, these categorisations do not exist in the project area.	Yes
2.3.1B	Where adverse impacts on MNES or ESAs are unavoidable, then impacts will be minimised or mitigated and site remediation and rehabilitation of impacted areas will take place to promote and maintain long term recovery of MNES and ESAs.	1. Hold discussions with key stakeholders to identify instances where adverse impacts have occurred on MNES or ESAs 2. Review evidence to determine if impacts have been addressed in accordance with the Protocol	Based on discussions with a Proponent representative, to minimise and mitigate any impacts on MNES or ESAs proposed infrastructure is sometimes relocated following Pegging Party surveys. We reviewed preclearance surveys and Engineering Work Requests which infrastructure was relocated where adverse impacts were unavoidable. During construction, barricades or flagging are erected around flora that needs to be avoided and fauna spotters are present during clearing. We viewed photos showing a cordoned off areas of threatened plant species. In addition, flagging and pegging of MNES areas were observed during the site visit. Remediation and rehabilitation is only triggered after infrastructure has been decommissioned. Prior to this only progressive rehabilitation is performed on well heads and gathering / trunk line to bring operational stability to the area. No infrastructure has been decommissioned to date (as of mid September 2014) given that it is only three years old and has an operational life of 20-30 years as stated in the Protocol.	Yes
2.3.1C	Site remediation and rehabilitation will occur in accordance with the requirements of the Remediation, Rehabilitation, Recovery and Monitoring Plan (RRRMP), QCLNGBX00-ENV-PLN-000026.	1. Obtain a representative random sample of no less than 10% of evidence, such as site inspection reports to identify methods employed to remediate and rehabilitate sites 2. Obtain a copy of the RRRMP 3. Review evidence to determine if the sites have been remediated and rehabilitated in accordance with the requirements of the RRRMP	In accordance with the RRRMP, QGC is required to ensure that all significantly disturbed land as a result of Gas Field activities is rehabilitated to the pre-disturbed land use and condition. This includes that each native vegetation community is re-established to show distinct and progressive reestablishment of the various strata; 80% species diversity and richness; 80% foliage cover when compared to the pre-disturbed vegetation community. We viewed Environmental Inspection Forms for a sample of sites noting soil, vegetation, erosion and water related characteristics of the rehabilitated site. At the time of survey, some sites had not met the key requirements of the RRRMP. However, the Proponent noted that the majority of sites will not be fully rehabilitated until post decommissioning of the infrastructure. Notwithstanding this, systems are in place to monitor rehabilitated sites to ensure they will be progressively rehabilitated to meet the foliage cover and species diversity targets for example. In conclusion, the approach to site remediation and rehabilitation is occurring in accordance with the RRRMP; however, the targets of the RRRMP have yet to be achieved.	Yes
2.3.1D	Management of listed species and ecological communities will occur in accordance with the requirements of the Significant Species Management Plan (SSMP), QCLNG-BX00-ENV-PLN-000025. The requirements of Condition 8 and 14 of DSEWPAC's approval for the gas field, relating to rehabilitation requirements, are addressed in the SSMP and RRRMP.	Refer to SSMP Checklist	Refer to SSMP Checklist	Refer to SSMP Checklist
2.3.1E	Depending on the species or ecosystem disturbed, QGC may offset any disturbances in accordance with QGC's Offset Strategy.	1. Hold discussions with key stakeholders to determine if disturbances to species or ecosystems have been offset 2. Obtain a copy of QGC's Offset Strategy 3. Review evidence to determine if disturbances have been offset in accordance with the Offset Strategy	Refer to 25.3a in the Audit Criteria & Methodology document	Refer to 25.3a in the Audit Criteria & Methodology document

3.0 Incorporation of the Protocol into Management Procedures				
3.0A	All proposed QCLNG infrastructure must be internally approved by relevant business groups prior to commencement of construction. Approvals can only be granted if proposed activities are approved under relevant State and Federal legislation and comply with any relevant conditions of approval.	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to identify the relevant internal business groups that are required to approve proposed infrastructure 2. Obtain a representative random sample of no less than 10% of infrastructure approvals. 3. Review evidence to determine if approvals were in place prior to commencement of construction 4. Review evidence to determine if activities were approved under legislation and complied with conditions of approval prior to approvals by business groups being granted 	<p>Based on discussions with a Proponent representative, internal sign off and approvals are obtained in the Access To Work (ATW) form which marks the end of the approvals stage of the Upstream Delivery Process (UDP) before the construction phase begins. Approvals must be obtained prior to commencement of construction. Review of the ATW form shows that it is signed off by Environment, Commercial, Tenures & Leasing, Cultural Heritage, Land, Social Performance, Water Solutions, Engineering, Well Engineering, Security, Operations and Roads. In many cases, these teams conditionally sign off the ATW subject to measures being implemented such as mitigation of impacts to TECs. We note that approval of some teams is carried forward from the prior Agreement Final Layout Request (AFLR) phase since teams such as Tenures & Licensing, and Roads do not have further relevant input after the AFLR stage.</p> <p>Each business group only provides approval if the proposed development aligns with the State and Federal requirements specific to the business group's function. When business groups provide conditional approval, they sometimes require relevant permits and associated conditions to be complied with as part of the conditional approval.</p> <p>We obtained a list of clearing permits. Based on a sample, each permit was addressed to QGC from the Department of Environment and Heritage Protection and related to the approval of a clearing permit application made under the Nature Conservation (Administration) Regulation 2006.</p> <p>We reviewed a sample of preclearance surveys and cross referenced the date with QGC spreadsheets showing construction start date for the associated infrastructure. In every case, preclearance surveys occur prior to disturbance.</p>	Yes
3.1 Summary of Process				
3.1A	The internal approvals process requires completion and approval of a Project Approvals Form (PAF), Land Access Request Form (LARF) or Project Access and Clearance Request (PACR). Approvals forms are generally raised by project engineers or managers wishing to undertake activities. The LARF and PAF process is generally used for a single type of infrastructure. The PACR process considers multiple infrastructure development at a block level or other geographic area with multiple infrastructure types. All approvals forms must be approved by the relevant managers of the following business groups: <ul style="list-style-type: none"> • Environment and Licensing • Land Access and Social Performance • Commercial • Tenures • Health, Safety and Security (HSS) • Cultural Heritage 	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to determine the types of infrastructure approved to date 2. Where available, obtain a representative, random sample of no less than 10% of all PAF's, LARF's and PACR's 3. Review evidence to determine if forms have been approved by the relevant managers of the business groups as specified in the Protocol 	<p>Based on discussions with a Proponent representative and observations during a site visit conducted on 16 September 2014, all infrastructure types have been approved including gas wells, gathering, trunklines, utilities, Field Compressor Stations (FCS), Central Processing Plants (CPP), substation, powerlines etc.</p> <p>Note that the terminology adopted by QGC differs to that cited in the Protocol following a reform of the internal approvals process as part of the UDP. The equivalent of PAF is the access to work (ATW) and the equivalent to LARF is a mixture of the Agreement of Final Layout Request (AFLR) and the ATW. We obtained copies of the ATW and AFLR forms noting they were signed off by Environment, Tenures & Licensing, Land, Social Performance, Commercial, Security and Cultural Heritage.</p> <p>Sample testing highlights that in some cases, evidence of approval has not been provided by all stakeholders. Furthermore, in all samples selected, there was no evidence of approvals from Health & Safety stakeholders.</p>	No
3.1B	Environment and Licensing and Land Access and Social Performance will consider all environmental and social constraints that may be impacted by the proposed infrastructure based on information held in QGC's GIS.	<ol style="list-style-type: none"> 1. Hold discussions with a representative from Environment and Licensing and/or Land Access and Social Performance to identify if information held in QGC's GIS was considered in determining the approval 2. Obtain and review a representative random sample of no less than 10% of all of the proposed infrastructure to confirm that all environmental and social constraints that may be impacted by the proposed infrastructure are based on information held in GIS has been considered 	<p>Based on discussions with a Proponent representative, QGC use the MapMagic GIS system to identify the potential environmental or social risks at the proposed development site which is used to inform the conceptual design. This is then ground truthed on site via the pegging party / preclearance surveys.</p> <p>Sampled AFLRs confirm that all environmental and social constraints that may be impacted by the proposed infrastructure based on information held in GIS have been considered.</p>	Yes

3.1C	Conceptual layouts of proposed infrastructure will be supplied for approval. Amendments will be made to the proposed infrastructure location based on a determination of the optimal conceptual location given multiple competing constraints. In addition to environmental and social constraints, engineering, cultural heritage, tenure, commercial and health and safety constraints may influence the determination of the optimal conceptual location.	1. Hold discussions with relevant stakeholders to identify how the optimal conceptual location was determined 2. Obtain and review a representative random sample of no less than 10% of all conceptual layouts of proposed infrastructure to confirm that conceptual layouts of proposed infrastructure have been supplied for approval and that proposed infrastructure location has been based on a determination of the optimal conceptual location given multiple competing constraints	Based on discussions with a Proponent representative the optimal conceptual location is determined at the Preliminary Activities stage via desktop review of site specific considerations such as noise risk, land use, sub surface condition, commercial, engineering optimisation, ecological constraints and land ownership. The Project Access & Clearance Request (PACR) represents the sign off of the conceptual layout. We reviewed sample PACRs noting that they all provided evidence that conceptual layouts were completed for proposed infrastructure at the preliminary stage. The Environmental Review, Issues Register and CROME Exception Report included in PACRs evidence that site specific environmental constraints have been considered in the development of the optimal conceptual layout. For example, the issues Register raises a list of concerns where the placement of proposed infrastructure may interfere with streams or 'of concern' vegetation for example, and recommends that the pegging party locate the infrastructure to avoid such interferences.	Yes
3.1D	Once an optimal conceptual location has been selected by QGC, the selected location will be surveyed and presented to relevant landholders for consideration.	1. Obtain and review a representative random sample of no less than 10% of all conceptual layouts of proposed infrastructure to show that the optimal conceptual location was surveyed 2. Obtain and review evidence to determine if the survey information was presented to relevant landholders	The optimal conceptual layout is selected in accordance with the Proponent's Upstream Development Process (UDP) described in Criterion 5.9. This is based on initial desk based conceptual layout design subsequently ground truthed via a preclearance survey of each proposed location. The Proponent aims to involve landholders at an early stage encouraging them to attend the preclearance survey so they have the opportunity to propose changes to the location of infrastructure where possible. This may be the result of landholder ecological concerns or other concerns such as site access issues. Once the location is agreed, a Post Survey and Landholder Maps (PSLM) is signed off by the landholder. Site activities do not commence until the PSLMs are signed off. Based on samples selected, evidence confirms that survey information was presented to relevant landholders via the PSLMs.	Yes
3.1E	Survey results and landholder opinions on the preferred location of infrastructure will be considered and this may result in further refinements to the optimal location of infrastructure.	Obtain and review a representative random sample of no less than 10% of survey results and landholder opinions to determine whether they have been considered in refining the optimal location of infrastructure	Based on review of PSLMs, evidence confirms that landholders have been considered in refining the location of the infrastructure. However, no evidence was provided to enable us to conclude that 'optimal' locations for infrastructure were selected.	Yes
3.2 Integrated Approvals for Execution				
3.2A	The process by which approval occurs is referred to as the Integrated Approvals for Execution (IAE). This consists of a number of development stages prior to execution	Obtain a walkthrough of the IAE process for one approval and obtain the following evidence:	Based on discussions with a Proponent representative, the terminology that the Proponent employ is different to that stated in the Protocol. The IAE process is termed the Upstream Delivery Process (UDP) by QGC. This consists of a three stage development process prior to execution (ie construction). In summary, this involves: 1. Preliminary Activities: concept design based on desktop environment review of constraints, followed by cross departmental approvals 2. Access Clearances & Agreement: consent to entry agreement, preclearance surveys and significant species surveys, landholder agreement of final layout 3. Execution Approvals: Access To Work document agreed by internal stakeholders, project managers and contractors prior to execution.	Yes

3.2.1 Preliminary Activities				
3.2.1A	The preliminary activities stage includes all activities that are necessary to take the conceptual layout design for the project scope to the point where Land Access can engage landholders. The activities include:	Obtain and review evidence that the preliminary activities stage included all activities that are necessary to take the conceptual layout design for the project scope to the point where Land Access can engage landholders.	Refer to 3.2.1A.i - v in this document.	Refer to 3.2.1A.i - v in this document.
3.2.1A.i	• consideration of all constraints including environmental and social constraints	Obtain and review evidence that the preliminary activities stage included consideration of all constraints including environmental and social constraints.	PACRs included evidence of consideration of all environmental constraints including Zone 4a constraints, ESAs and wetlands, as well as social constraints including proximity to sensitive receptors as evidenced in constraints mapping, desktop AFLR checklists and appended issues registers.	Yes
3.2.1A.ii	• verification of base data,	Obtain and review evidence that the preliminary activities stage included verification of base data.	Based on discussions with Proponent representatives, at PACR stage the Proponent undertakes a review of the available government online databases to confirm QGC mapping is consistent in this area. These add value for the ecologists to ensure they have the latest updates to consider when ground truthing. This process is understood to occur at both PACR and AFLR stages. We reviewed a series of documents showing desk based review of government data including: i) A Protected Plants Survey Trigger Map published by the DEHP that shows high risk areas for the lot covered by the proposed development ii) A Regulated Vegetation Management Map and Vegetation Management Supporting Map published by the DNRM that shows sensitive areas for the lot covered by the proposed development iii) A Map of Referable Wetlands - Wetlands Protection Areas published by the DEHP that shows designated wetland areas for the lot covered by the proposed development iv) A report following a search on the Queensland Government website for species listings around the point location of a proposed development	Yes
3.2.1A.iii	• conceptual layout of infrastructure, and	Obtain and review evidence that the preliminary activities stage included conceptual layout of infrastructure.	Based on sampled PACRs, preliminary activities stage included the provision of a conceptual layout of infrastructure.	Yes
3.2.1A.iv	• multifunctional review and approval of the conceptual layout.	Obtain and review evidence that the preliminary activities stage included multifunctional review and approval of the conceptual layout.	Whilst a number of sampled PACRs did not include evidence of review and approval of the conceptual layout from multifunctional stakeholders at the preliminary activities stage, we noted that in every case these related to an outdated version of the PACR signed prior to the issue of the Protocol. The requirement is therefore not relevant in these instances. We note that PACRs show multifunctional approval from Environment, Commercial, Land, Subsurface and other departments in all instances following the publication of the Protocol.	Yes
3.2.1A.v	At the end of this stage a package of information, referred to as the Project Access and Clearance Request (PACR), is compiled and issued to the internal project stakeholders who will be involved in the survey and clearance of the impacted land.	Obtain and review evidence that the PACR was issued to appropriate internal project stakeholders	Review of a sample of PACR forms evidenced issue to managers from multiple departments including the Manager Environmental Upstream Project, who manages the team of field ecologists who undertake the surveys. The PACR is disseminated through the manager to the relevant individuals undertaking the survey. It was noted that PACRs issued in 2011 include sign offs by the responsible and accountable parties, a list of individuals with consultation and review roles, and the individuals to which the PACR is issued. Whilst later iterations of the PACR template did not include the individuals to which the PACR is issued, we reviewed a sample of document transmittal confirmations that evidence these documents were issued to internal project stakeholders.	Yes
3.2.1B	The information contained in the PACR includes:	Obtain and review a representative random sample of no less than 10% of all PACR's to determine they contain/addresses all of the information required in the Protocol including:	Refer to 3.2.1B.i - vi in this document	Refer to 3.2.1B.i - vi in this document

3.2.1B.i	<ul style="list-style-type: none"> Description of existing facilities and ongoing project requests in the same area. 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Sampled PACRs include descriptions of both existing facilities and ongoing project requests in the same areas as the proposed infrastructure.	Yes
3.2.1B.ii	<ul style="list-style-type: none"> Conceptual maps of all infrastructure planned as part of the project, shown on aerial imagery. 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Sampled PACRs include conceptual maps of all infrastructure planned as part of the project, shown on aerial imagery.	Yes
3.2.1B.iii	<ul style="list-style-type: none"> Environmental and social constraints maps. 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on sample of PACRs selected, a number of these preliminary reports did not include social constraint maps and/or also lacked environmental constraint mapping. For example, Polaris-Acrux block development includes aerial imagery and infrastructure mapping, but no environmental or social constraints maps.	No
3.2.1B.iv	<ul style="list-style-type: none"> Construction schedule for the infrastructure within the scope requested. 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on sampled PACRs, a number of PACRs do not include a construction schedule for the infrastructure within the scope requested. For example, the Celeste PACR.	No
3.2.1B.v	<ul style="list-style-type: none"> Descriptions of allowable deviation from the conceptual layout for each type of infrastructure. 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Sampled PACRs include a description of allowable deviation from the conceptual layout for each type of infrastructure.	Yes
3.2.1B.vi	The information contained in the PACR allows the stakeholder groups to assess the request and marks the start of the Access, Clearance and Agreements period	Obtain and review the information in the PACR to determine if it contains: - all of requirements in the Protocol; - allows the stakeholder groups to assess the request and marks the start of the Access; and - Clearance and Agreements period.	PACRs include the necessary information such as proposed infrastructure scope, access and clearance requirements, environment and social constraints and site drawings which are considered appropriate for stakeholder groups to assess the request. The Upstream Delivery Process (UDP) flow diagram shows that the publication of the PACR marks a key milestone prior to the Approval to Access phase.	Yes
3.2.4 Survey and Clearances				
3.2.4A	<p>Survey and clearance of infrastructure on a property (also known as a pegging party) is organised once there is notification from Land Access that CtoE Agreements are in place. The following groups will attend pegging parties:</p> <ul style="list-style-type: none"> Site Survey and Clearance Coordinator Land Access Construction Engineering (all applicable incl. gathering, trunklines and civil) Survey Environment, including specialist ecologists (with relation to ecological surveys for the presence or absence of MNES, ecologists will be approved by DSEWPAC) Cultural Heritage (incl. Archaeologist where necessary) Safety Drilling Subsurface <p>Any changes to the location or routing of infrastructure will be agreed with the group representatives in attendance. To ensure efficient use of resources it is important that the majority of changes can be agreed on site by representatives for each group (e.g. drilling, subsurface, gathering, trunklines, FCS, general infrastructure etc.). Where agreement cannot be reached by the party on site a query will be sent to the Responsible Project Engineer / Manager who will be responsible for coordinating a resolution. It will be necessary to arrange second pegging parties of properties.</p>	<p>1. Obtain and review a representative random sample of no less than 10% of all pegging parties as evidence that a pegging party has taken place and review attendance records (where available) to determine if the required groups attended</p> <p>2. Obtain and review minutes from the pegging party (where available) to determine if the method to change the location of infrastructure is in line with the Protocol</p>	<p>Based on Preclearance Surveys sampled, all required groups as noted in the condition were not documented as having attended the pegging party. For example in preclearance survey ISA0026 there is no evidence of representation from its Approval and Clearance Coordinator, Survey, Safety, Drilling, and Subsurface parties.</p> <p>It is understood from a Proponent Representative that there are no instances where the pegging party did not reach an agreement onsite. Where agreement cannot be reached by the party on site a query is sent to the Responsible Project Engineer / Manager who is responsible for coordinating a resolution. It will be necessary to arrange second pegging parties of properties. Where there is a requirement to clear sensitive flora or fauna habitats this is reported in the pegging party report and then Proponent management decide on whether they are willing to accept a disturbance or not. If not, a disturbance they would re-align and re survey.</p>	No

3.2.5 Landholder Agreement			
3.2.5A	Following site survey and confirmation of clearance from each of the stakeholder groups the Responsible Project Engineer will prepare the "Landholder Agreement Request" (LAR). The landholder agreement stage will then be managed by the Land Access department. The Landholder Agreement Request (LAR) contains all the necessary information for Land Access to have a valuation produced and to prepare for negotiation with the landholder.	<ol style="list-style-type: none"> 1. Sight a representative random sample of no less than 10% of all Landholder Agreement Requests (LARs) 2. Determine if the LARs contain all the necessary information for Land Access to have a valuation produced and to prepare for negotiation with the landholder 	<p>The Landholder Agreement Request is represented by the Agreement of Final Layout Request (AFLR). We obtained copies of the Agreement of Final Layout Request documents that defines the final layout and planned activities of proposed infrastructure prior to approaching the landholder to discuss compensation.</p> <p>Sampled AFLRs include appropriate information for Land Access to value and prepare for negotiation. Information includes infrastructure type and location, the landholder name, maps and site drawings for agreement with the landholder, access requirements, permits, licenses, applications and notifications obtained, environmental constraints and a Post Survey Landholder Map (PSLM) for final landholder sign off of infrastructure location.</p>
3.2.6 Execution Approvals			
3.2.6A	The Execution Approvals Package will be compiled by the Responsible Project Engineer. This package of documents will comprise all of the reports detailing the findings from the site survey and clearance. This will be issued to the execution Project Managers	<ol style="list-style-type: none"> 1. Sight a representative random sample of no less than 10% of all Execution Approvals Packages (EAPs) 2. Determine if the EAPs contain all reports detailing the findings of the site survey and clearance 	<p>Based on sample reviewed, ATWs contain relevant reports detailing the findings of the site survey and clearance. This includes Environment Assessments, results of Preclearance Surveys, and where relevant, evidence of signed PSLMs.</p>
4.0 Process for Selecting Infrastructure Locations			
4.0A	The process of site selection for CPPs, FCSs, WTPs and brine ponds is applied in the following order: <ol style="list-style-type: none"> 1. A conceptual site is selected based on optimising engineering and commercial requirements. These may include the following for different major infrastructures 	<ol style="list-style-type: none"> 1. Select a representative random sample of no less than 10% of all CPP's, FCS's, WTP's and brine ponds 2. Determine if the site selection process is in line with/addresses the Protocol 3. Obtain and review maps and/or other documentary evidence to substantiate that the site selection process was adhered to 	<p>Refer to 4.0A.i - viii of this document.</p>
4.0A.i	<ul style="list-style-type: none"> • A FCS should be located as close to the centre of a block as possible. By minimizing the distance between wells and the FCS gas flows are optimized by minimizing gas gathering system length thus minimizing back pressure on the wellhead. To optimize gas flows between FCSs and CPPs, the maximum distance between an FCS and CPP is approximately 50km and the minimum distance between CPPs is approximately 20km. 	<p>Obtain and review evidence to determine if the requirements of the Protocol have been met</p>	<p>Based on discussions with the Proponent have not considered a new FCS/CPP location since the original project conceptual development back in 2010 – 2011. The Compression team review the area required for development as per tenure boundaries to decide what compression is required. This is then managed by the Area Asset teams in consultation with Engineering, and assessed within a PACR review. The desirable location is ordinarily centred within the block but may deviate depending on site specific considerations such as noise risk, land use, sub surface condition, commercial, engineering optimisation, protocol constraints and land ownership. The optimal location reduces risk to QGC for social and environmental matters and reduces costs from excessive infrastructure development such as trunkline and gathering costs.</p> <p>Based on sample PACRs selected, FCSs are not located in centre of the the block as per maps reviewed. We were unable to determine if the FCS's are located 'as close to the centre of the the block as possible' in line with the protocol requirement.</p>
4.0A.ii	<ul style="list-style-type: none"> • WTPs should be located in locations suitable for brine and salt management and to minimise the length of pipeline required to transfer raw water to the WTP and transfer treated water to beneficial users, whilst taking advantages of economies of scale by minimizing the number of WTPs. 	<p>Obtain and review evidence to determine if the requirements of the Protocol have been met</p>	<p>The Proponent's Water Management Plan describes the water management infrastructure comprising three WTPs, a relocatable WTP at Kenya that supplies the Chincilla Beneficial Use Scheme, the Northern WTP approximately 150km away at Woleebee Creek, and Windibri WTP. The Kenya and Northern WTPs provide treated water for beneficial reuse which meets the water quality limits set in their respective approvals.</p> <p>Based on review of the document and information from a Proponent representative, the Proponent has elected to apply a centralised water management approach around two hubs at its Kenya/Windibri and Woleebee Creek processing centres in the Central and Northern Development Areas respectively. The Central (Kenya) and Northern (Woleebee) water treatment plants have a target of 97% water recovery. This increased recovery is possible through the centralisation of the facilities and inclusion of brine concentration systems. The benefits of QGC's centralised approach are localised management of CSG water in discrete areas on QGC owned land and cost-effective facilities by leveraging scale and redundancy.</p>

4.0A.iii	<ul style="list-style-type: none"> Large ponds will be located to balance water flows in case of upset conditions at WTPs or in other parts of the water transfer network. 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on review of PACRs, evidence of large pond location is available. However, evidence could not be provided to determine that the ponds were located to 'balance water flows in case of upset conditions at WTPs or in other parts of the water transfer network'.	Undetermined
4.0A.iv	<ul style="list-style-type: none"> Brine storages and salt landfills will be located in proximity to WTPs and to minimise environmental impacts. 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on review of the Water Management Plan and discussions with stakeholders, it is understood that three WTPs have been constructed. Based on review of PACRs, it could not be confirmed that 'brine storages and salt landfills are located in proximity to WTPs and to minimise environmental impacts'.	Undetermined
4.0A.v	<p>2. QGC consider the ownership of the properties near the centre of each block. Ownership is categorized as:</p> <ul style="list-style-type: none"> QGC owned land State owned land (e.g. State Forest) Other land (e.g. freehold properties) <p>QGC owned land is preferred as the potential infrastructure site option to all other land ownership types. Where QGC owns a property in a graticular block, QGC will not generally seek to acquire a separate property in a block in order to minimise disruption to the community through acquisition of more properties than required. QGC will seek to avoid land under State ownership. Where QGC does not own land, other properties will be considered for siting infrastructure. This may be achieved through acquisition of land or negotiation with landholders for long term access.</p>	Obtain and review evidence to determine if the requirements of the Protocol have been met	<p>Based on discussions with Proponent representatives, QGC consider centralised land ownership for major facility sites including CPPs, FCS's and ponds since these locations can be intensive in terms of development.</p> <p>Based on discussions with a Proponent representative, QGC aim to purchase land for major infrastructure. QGC seek to purchase land at the centre of the each block; however, this is dependent on local environmental and social constraints.</p> <p>QGC has not compulsory purchased land to date (as of November 2014). Instead, QGC seek identification and agreement with landholders through negotiation rather than acquisition.</p> <p>Based on review of documentation, the Polaris FCS is situated on QGC owned land and located at the centre of the block.</p>	Yes
4.0A.vi	3. Once a property has been identified as the best potential site for locating major infrastructure, engineering, environmental and social constraints are considered in selecting the optimal location within that property.	Obtain and review evidence to determine if the requirements of the Protocol have been met	Review of sample ATWs confirms that for all proposed sites for CPPs and FCSs, location of infrastructure involved consideration of infrastructure, engineering, environmental and social constraints. We note that samples selected did not include any WTPs or brine ponds and it was not possible to determine from documentation review if the 'optimal location' location was selected per se.	Yes
4.0A.vii	4. This preliminary location is then considered through a formal approvals process within QGC that requires input from all departments, including Land Access, Environment, Cultural Heritage, Health and Safety and Social Performance, as described in Section 3.0. Site surveys including ecological, geotechnical and cultural heritage surveys of the preliminary location are conducted with a view to refining the location or informing a decision that the property is not suitable.	Obtain and review evidence to determine if the requirements of the Protocol have been met	<p>Based on sample review of approvals contained in the PACR and AFLR/ATW documents, while all proposed infrastructure (CPPs and FCSs) have had site surveys completed to refine location or inform decision making, a number of PACRs fail to include evidence of relevant formal approvals from across stipulated departments. For example, it was noted that approvals from Health and Safety stakeholders was not provided in the PACR/AFLR/ATW documents for Matilda John or Sean block.</p> <p>Sample testing also confirms that where a proposed route/location is deemed unsuitable, an alternate location is selected where possible. Samples selected did not include any WTPs or brine ponds.</p>	No
4.0A.viii	Where environmental and social constraints dictate that there is not a suitable location within the chosen property, then an alternative property will be considered. Environmental and social constraints are described below.	Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on sample selection of preclearance surveys, no situations were noted where environmental and social constraints dictated that location of CPPs and FCSs was unsuitable, hence requiring an alternative property to be considered.	Undetermined
4.0B	<p>The process of site selection for infrastructure, other than CPPs, FCSs, WTPs and brine ponds, is applied in the following order:</p> <ol style="list-style-type: none"> A conceptual site or route is selected based on optimising engineering and commercial requirements. These may include the following for different minor infrastructures: 	<ol style="list-style-type: none"> Select a representative random sample of no less than 10% of all other types of infrastructure, other than CPP, FCS, WTP or brine ponds Determine if the site selection process is in line with/addresses the Protocol Obtain and review maps or other documentary evidence to substantiate that the site selection process was adhered to 	Refer to 4.0B.i - xiii in this document.	Refer to 4.0B.i - xiii in this document.
4.0B i	<ul style="list-style-type: none"> Wells are located on a 750m grid spacing to optimise gas recovery 	Obtain and review evidence to determine if the requirements of the Protocol have been met	<p>Based on discussions with a Proponent representative, wells are located on a 750m grid spacing where practical, dependent on local environmental and social constraints.</p> <p>Based on sampled PACRs and ATWs, wells appear to be located on a 750m grid spacing to optimise gas recovery.</p>	Yes

4.0B ii	<ul style="list-style-type: none"> Gas gathering line routes are selected to minimise the length of pipe between wells and FCSs 	Obtain and review evidence to determine if the requirements of the Protocol have been met	<p>Based on discussions with a Proponent representative, wells are located on a 750m grid spacing where practical, dependent on local environmental and social constraints. Associated gathering lines and access routes are then located to service the wells. The length of pipe between wells and FCSs is minimised where possible on the basis that it is economically prudent to do so to minimise cost and to reduce the footprint of the infrastructure. However, based on the local environmental and social constraints in the area, it is not always possible to minimise the length of gathering line routes.</p> <p>Document review of ATWs and PACRs was unable to verify whether trunk and gathering lines were selected to minimise the length of pipe between wells and FCSs.</p>	Undetermined
4.0B iii	<ul style="list-style-type: none"> Water gathering lines are selected to minimise the length of pipe between wells and regional storage ponds 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Refer to 4.0B.ii of this document.	Refer to 4.0B.ii of this document.
4.0B iv	<ul style="list-style-type: none"> Gas trunkline routes are selected to minimise the length of pipe between FCSs and CPPs 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Refer to 4.0B.ii of this document.	Refer to 4.0B.ii of this document.
4.0B v	<ul style="list-style-type: none"> Water trunkline routes are selected to minimise the length of pipe between regional storage ponds and WTPs 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Refer to 4.0B.ii of this document.	Refer to 4.0B.ii of this document.
4.0B vi	<ul style="list-style-type: none"> Infield storages are located to optimise water flows from a group of wells and balance water flows along water gathering line 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Refer to 4.0B.ii of this document.	Refer to 4.0B.ii of this document.
4.0B vii	<ul style="list-style-type: none"> Regional storage ponds are located in proximity to FCSs, whilst allowing for topographical influences on water flow. 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on review of sample of ATWs and PACRs, storage ponds are located in proximity to FCSs. However, evidence could not be provided to demonstrate that these were located to allow for topographical influences on water flow.	Undetermined
4.0B viii	<ul style="list-style-type: none"> E&A ponds are located in proximity to a group of exploration wells and where they have a reasonable probability of being converted to a regional storage pond 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on review of sample of ATWs and PACRs, unable to verify based on document review whether E&A ponds are located in proximity to a group of exploration wells, where they have a reasonable probability of being converted to a regional storage pond.	Undetermined
4.0B ix	<ul style="list-style-type: none"> Borrow pits are located in proximity to construction works and to minimise transport distances 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on sampled PACRs and ATWs, and associated conceptual maps, proposed and current borrow pits appear to be located in proximity to construction works. However, evidence could not be obtained to confirm whether borrow pits have been located to minimise transport distances.	Undetermined
4.0B x	<ul style="list-style-type: none"> Power lines are located along trunkline ROWs 	Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on review of sampled ATWs and PACRs, where existing and proposed trunklines are located within the scope of infrastructure, power lines are collocated.	Yes
4.0B xi	2. Infrastructure need not be located on QGC owned land as a priority.	Obtain and review evidence to determine if the requirements of the Protocol have been met	<p>Based on discussions with a Proponent representative, infrastructure is not located on QGC land as a priority. Approximately 10% of infrastructure is placed on QGC owned land, primarily relating to major infrastructure.</p> <p>Review of a sample of PACRs confirms that infrastructure, other than CPPs, FCSs, WTPs and brine ponds is not located on QGC in the majority of cases, but located on private land.</p>	Yes
4.0B xii	3. Once a conceptual route or location is selected for infrastructure, environmental and social constraints are considered in refining the route or location.	Obtain and review evidence to determine if the requirements of the Protocol have been met	Sample PACRs and ATWs selected confirms that infrastructure, environmental and social constraints were considered in refining the route or location of proposed infrastructure based on initial conceptual route or location selected. This has been confirmed for infrastructure of other than CPPs, FCSs, WTPs and brine ponds.	Yes

4.0B xiii	4. This proposed location is then considered through a formal approvals process within QGC that requires input from all departments, including Land Access, Environment, Cultural Heritage, Health and Safety and Social Performance, as described in Section 3.0. Site surveys including ecological, geotechnical and cultural heritage surveys of the proposed location are conducted with a view to refining the location or informing a decision that the property is not suitable. Where environmental and social constraints dictate that there is not a suitable location within the chosen property, then an alternative property will be considered. Environmental and social constraints are described below.	Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on sample review of approvals contained in the PACR and AFLR/ATW documents, while all proposed infrastructure (other than CPPS, FCSs, WTPs and brine ponds) have had site surveys completed to refine location or inform decision-making, a number of PACRs fail to include evidence of relevant formal approvals from across stipulated departments. For example, no sign off has been obtained from H&S, such as the Polarisk trunkline AFLR. Sample testing also confirms that where a proposed route/location is deemed unsuitable, an alternate location is selected where possible.	No
4.1 System Documentation				
4.1A	For each location selected for an infrastructure type, a report will be generated for all constraints at that location and records maintained for the reasons for selection of that location. This will be particularly relevant where high or very high constraint areas are selected for infrastructure locations.	1. Obtain a list of infrastructure locations and the type of constraint areas in which they are located 2. Select a representative random sample of no less than 10% of all high or very high constraint areas (where available) 3. Obtain and review the report(s) for the infrastructure located in the high or very high constraint area 4. Determine if the report(s) includes the information specified in this Protocol requirement	Based on discussions with key stakeholders and confirmation via review of PACRs, Preclearance Surveys, and ATWs, a review of constraints at the infrastructure location is conducted and documented for all constraint levels irrespective of the constraint being high or very high. This was confirmed via review of sampled PACRs, preclearance surveys and ATW documents.	Yes
4.1B	No go areas will not have infrastructure unless: 1) ground truthing and field ecological surveys demonstrate that siting infrastructure in that location will cause minimal adverse impact on MNES or ESAs, including habitat for listed species and/or MNES/habitat is recoverable or a suitable offset is agreed; 2) it would be within disturbance limits; and 3) other constraints preclude any alternative location.	1. Hold discussions with key stakeholders to identify any no go areas that have infrastructure 2. Review database and/or other records to identify all areas zoned 'no go' in which infrastructure has been built 3. For infrastructure in no go areas, determine if the requirements of the Protocol have been met/addressed. A representative random sample of no less than 10% of all 'no go' areas with infrastructure should be reviewed	Based on discussions with a Proponent representative, it is uncommon for infrastructure to be located in MNES no go areas since the Proponent's Upstream Delivery Process aims to avoid these areas. Where impacts do occur to no go areas, a Record of Impacts document is developed and approved by Proponent representatives. The Records of Impacts documents record the expected disturbance to MNES prior to clearing. We reviewed a sample of Record of Impacts documents in cases where impacts were predicted to impact MNES, noting that they: 1. Provide justification for the action taken, demonstrating that infrastructure was located only in areas that caused minimal adverse impacts to MNES based on the findings from the field ecological surveys. For example, a Record of Impacts relating to a proposed clearance activity in the Poppy areas states that 'due to the nature of the infrastructure and the location of the vegetation it was not possible to avoid clearing entirely. The community was not segmented as a result of clearing and several wells to the south of the pipeline were removed from scope to negate the need to further disturb the TEC'. 2. Justifications provided for impacting MNES are based on the selection of the less environmentally damaging option given other localised constraints (for example stream order 1 watercourses in the vicinity), or due to landholder constraints or site specific engineering constraints. This shows that the location was selected on the basis that other constraints precluded an alternative location. We also reviewed the Proponent's disturbance spreadsheet noting that all disturbance to date (as of November 2014) were within permissible disturbance limits.	Yes
4.1C.I	In relation to MNES specifically, proposed infrastructure locations will be determined in accordance with the following: I. Preferentially avoid native vegetation that constitutes a listed ecological community and/or may provide habitat for listed species and utilise previously cleared or previously utilised areas;	1. Hold discussions with key stakeholders to determine if infrastructure has been located in MNES 2. Review database and/or other records to determine where infrastructure is located (or proposed) in MNES 2. Where infrastructure is located in MNES, obtain documentary evidence to determine if the requirements of the Protocol have been met/addressed. A representative random sample of no less than 10% of all areas on MNES with infrastructure should be reviewed	Based on discussions with Proponent representatives, it is uncommon for infrastructure to be located in MNES no go areas due to the Proponent's policy to avoid TECs identified during the preclearance survey phase. In reviewing the 10% sample of preclearance reports, the Proponent preferentially avoid native vegetation that constitutes a listed TEC such as Brigalow TEC, notwithstanding clearance of individual or small areas of Brigalow that does not meet the remnant definition under EPBC. Where relevant, the Proponent recommends to its contractors to avoid areas by using techniques such as underground drilling and thrust boring and utilising previously cleared areas.	Yes

4.1C.II	II. Exclude exploration and production wells from within areas identified as environmental constraint class Zone 4a unless their location within environmental constraint class Zone 4a is justified as an exception given other constraints and the impact on any MNES will be minimal, short term and recoverable; and	1. Hold discussions with key stakeholders to determine the extent and type of development in constraint class Zone 4a 2. Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on a walkthrough of the GIS system with Proponent representatives, Zone 4a areas are actively avoided as much as possible during planning and preclearance surveys owing to their high environmental value and associated implications such as the requirement to adhere to disturbance limits and obtain clearing permits. We reviewed a mapbook of all Zone 4a areas overlaid with non-linear infrastructure locations, observing that the location of non linear infrastructure avoids Zone 4a areas. Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, no information is provided to confirm that the proposed location has been agreed as an exception given other constraints, or that the impact on any MNES will be minimal, short term and recoverable. However, the Record of Impacts documents provide justifications for impacting MNES which are on an exception basis given other local constraints. Ultimately, the decision to located infrastructure in MNES is based on the selection of the less environmentally damaging option given other localised constraints (for example stream order 1 watercourses in the vicinity). Alternatively, other landholder constraints or site specific engineering constraints may preclude the infrastructure being located elsewhere.	Yes
4.1C.III.a	III. either: a. exclude other non linear infrastructure from the no impact zone; or	1. Hold discussions with key stakeholders to determine the extent and type of development in located in the no impact zone 2. Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on discussions with Proponent representatives, linear infrastructure and wells are the only type authorised in MNES. Well spacing, landholder constraints and avoidance of actual Zone 4a areas minimises the opportunities for well locations and sometimes wells will be located within these buffer zones. Disturbance to MNES is avoided through barricading, fencing off etc where infrastructure is within close proximity. QGC seek to utilise existing disturbed areas (e.g. pastoral land) and utilise an "avoid, minimise, mitigate" method when undergoing site selection in relation to environmental constraints. Review of Zone 4a mapping for non linear infrastructure demonstrated that infrastructure other than exploration and production wells have been located in the no impact zone. Note that either 4.1C.III.a or 4.1C.III.B should be satisfied.	Refer to 4.1C.III.B of this document
4.1C.III.B	b. where the location of other non linear infrastructure in the no impact zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be minimal, short term and recoverable, or no adverse impact on any MNES, including habitat for any listed species;	1. Hold discussions with key stakeholders to determine the extent and type of development in located in the no impact zone 2. Obtain and review evidence to determine if the requirements of the Protocol have been met	Review of Zone 4a mapping for non linear infrastructure demonstrated that infrastructure other than exploration and production wells have been located in the no impact zone. Review of ATWs for other non linear infrastructure in the no impact zone does not demonstrate that there will be minimal adverse impact on any MNES, including habitat for any listed species.	No
4.1C.IV.c	IV. either: c. exclude linear infrastructure from the impact risk zone; or	1. Hold discussions with key stakeholders to determine the extent and type of development in located in the impact risk zone 2. Obtain and review evidence to determine if the requirements of the Protocol have been met	Refer to AC&M 5.4d.iv	Refer to AC&M 5.4d.iv
4.1C.IV.d	d. where the location of linear infrastructure in the impact risk zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be minimal adverse impact on any MNES, including habitat for any listed species.	1. Hold discussions with key stakeholders to determine the extent and type of development in located in the impact risk zone 2. Obtain and review evidence to determine if the requirements of the Protocol have been met	Refer to AC&M 5.4d.iv	Refer to AC&M 5.4d.iv

5.2 Identifying and Ranking Constraints				
5.2A	All constraints associated with environmental and social factors are assigned a ranking of: <ul style="list-style-type: none"> • low • medium • high • very high • no go 	Obtain and review evidence to determine if all constraints have been assigned a ranking in accordance with the Protocol	We obtained a walk through of the Proponent's Map Magic GIS system. We observed that environmental and social constraints layers in GIS assigned to different types of infrastructure, were given a ranking in accordance with the Protocol.	Yes
5.2B	No go areas will not have infrastructure unless: 1) ground truthing and field ecological surveys demonstrate that siting infrastructure in that location will cause minimal adverse impact on MNES or ESAs, including habitat for listed species and/or MNES/habitat is recoverable or a suitable offset is agreed; 2) it would be within disturbance limits; and 3) other constraints preclude any alternative location.	Refer to 4.1B of this document	Refer to 4.1B of this document	Refer to 4.1B of this document
5.2C	In relation to MNES specifically, proposed infrastructure locations will be determined in accordance with the following: I. Preferentially avoid native vegetation that constitutes a listed ecological community and/or may provide habitat for listed species and utilise previously cleared or previously utilised areas; II. Exclude exploration and production wells from within areas identified as environmental constraint class Zone 4a unless their location within environmental constraint class Zone 4a is justified as an exception given other constraints and the impact on any MNES will be minimal, short term and recoverable; and III. either: a. exclude other non linear infrastructure from the no impact zone; or b. where the location of other non linear infrastructure in the no impact zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be minimal, short term and recoverable, or no adverse impact on any MNES, including habitat for any listed species; IV. either: c. exclude linear infrastructure from the impact risk zone; or d. where the location of linear infrastructure in the impact risk zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be minimal adverse impact on any MNES, including habitat for any listed species.	Refer to 4.1C of this document	Refer to 4.1C of this document	Refer to 4.1C of this document
5.2D	Condition 5 (d) (iv) of EPBC approval 2008/4398 recognises that in relation to linear infrastructure (e.g. pipelines), constraints are not generally assigned a "no go ranking" as it is not always possible to avoid these constraint areas, especially where they are also linear in nature, such as watercourses. However, disturbance of any MNES will only be authorised, where necessary, up to the disturbance limits set out in condition 25 of EPBC approval 2008/4398.	1. Hold discussions with key stakeholders to determine if exploration, development, operation and decommissioning within the project area has disturbed any MNES 2. Obtain and review database and/or other records to determine where exploration, development, operation and decommissioning has disturbed any MNES 3. If so, obtain and review evidence to determine if authorisations to disturb MNES take into account the disturbance limits set out in condition 25 of the EPBC approval	Based on discussions with a Proponent representative, instances have occurred where MNES have been disturbed. Where this is identified at preclearance survey stage, a Record of Impacts form is completed. Following clearing, the Record of Impacts form is updated to show actual disturbance area. Actual disturbances are tracked in a disturbance spreadsheet that compares the cumulative disturbed area to the permissible disturbed area under the EPBC permit. Review of the Records of Impacts documents authorised by a Proponent representative take into account the disturbance limits set in condition 25 of the EPBC approval. Actual disturbance limits are tracked for each EBPC listed species against permissible disturbance limits in the Proponent's disturbance spreadsheet.	Yes
5.2E	Placing of infrastructure in the impact risk zone and no impact zone will be in accordance with condition 5 (d) of the EPBC approval. Management methods to mitigate impacts are described in the RRRMP and SSMP. Biodiversity offsets for MNES will be in accordance with conditions 26-42 of the EPBC approval.	Refer to 4.1C of this document	Refer to 4.1C of this document	Refer to 4.1C of this document

5.2.1 Constraints Classification in the QCLNG EIS			
5.2.1A	Zone 4a and 4b include areas with the highest ecological values. These values could potentially be significantly impacted by the CSG activities. It was therefore recommended in the EIS that all non-linear CSG infrastructure be excluded from these Zones.	Obtain and review evidence to determine if any non-linear CSG infrastructure has been included in environmental constraint class zone 4a and 4b	<p>We obtained a map book from the QGC GIS team that illustrates all non-linear infrastructure developments overlaid with Zone 4a and 4b ecological constraints. We understand that Zone 4b only includes watercourses and Regional Ecosystem 11.3.27 (freshwater wetland) which are both State matters managed under the Environmental Authority issued by the DEHP. Zone 4b is not mentioned in the EPBC Approval and is included in the Protocol only because QGC chose to merge State and Federal matters into the same document. Zone 4b is therefore not applicable to this audit.</p> <p>We observed that non-linear infrastructure is included in Zones 4a in multiple instances which is not aligned with the EIS recommendation that all non-linear CSG infrastructure should be excluded from these Zones.</p> <p>We reviewed a sample of case noting that in each case, well pads were located where the impact was justified given other constraints and the impact was minimal, short term and recoverable, as per section 4.1 of the Protocol, approved by the Department.</p> <p>Therefore, whilst the Protocol and the EIS appear to conflict in relation to the siting of non linear infrastructure in Zone 4a areas, on the basis that the Proponent has aligned with the Protocol, an observation has been raised.</p>
5.2.1B	<p>Zone 4a includes:</p> <ul style="list-style-type: none"> • Gurulmundi State Forest and the Environmentally Sensitive Area immediately north west of the state forest. The location of linear infrastructure (e.g. pipelines and access tracks) through this area will be determined by ecologist field studies at the detailed design stage to follow existing tracks and previously disturbed areas where possible and to avoid or minimise disturbance of highest value areas (e.g. EVNT plant populations, high quality fauna habitats, steep terrain) • All EPBC Act listed Threatened Ecological Communities • All EPBC Act listed Flora Species • Those listed threatened and migratory fauna species habitats as identified in management plans, which where relevant may be described in terms of specific niche habitat types 	<ol style="list-style-type: none"> 1. Obtain and review a representative random sample of no less than 10% of ecologist field studies to determine if linear infrastructure has been located to follow existing tracks and previously disturbed areas, and to avoid or minimise disturbance of high value areas 2. Obtain and review evidence to determine if zone 4a includes the sensitive areas described by the Protocol 	<p>We reviewed a map generated by the QGC GIS team showing Zone 4a areas overlaid with EPBC listed areas including Gurulmundi State Forest, TECs, listed flora species and potential SSMP habitat areas, noting that all EPBC listed areas were included in Zone 4a.</p> <p>Based on discussions with a Proponent representative, we understand that no petroleum activities have occurred within the Gurulmundi State Forest and the ESA immediately north west of the state forest.</p> <p>Whilst review of the Proponent's Protocol, Survey Guideline, preclearance surveys and ATWs shows that QGC aim to use previously disturbed areas and existing tracks where possible, we note that in this case, the criterion requires this in the Gurulmundi State Forest and the ESA immediately north west of the state forest. This is not not applicable given that no petroleum activities have occurred in this area.</p> <p>Given that the Proponent complies with three of the components of this Criterion, with the remaining component not applicable, on balance the Proponent demonstrates compliance with this criterion.</p>
5.2.1C	All zone 4a ecological constraints are included in QGC's highest environmental constraints classes. All MNES matters are included in highest ecological constraints ranking; very high or no go as required by condition 5 (d). Note that condition 5 (d) treats linear and non-linear infrastructure differently	<ol style="list-style-type: none"> 1. Obtain and review evidence to determine if zone 4a constraints are included in QGC's highest environmental constraint classes 2. Obtain and review maps of MNES for the project area 3. Obtain and review ecological constraint maps 3. Cross reference MNES and ecological constraint maps to determine if all MNES are included in the highest constraints ranking 	<p>We obtained a walk through of the Proponent's Map Magic GIS system. We reviewed the 'Zone 4a - EPBC' ecological constraint description within the CROME Model of the Map Magic system. The information box stated that 'Zone 4a means Gurulmundi State Forest and the ESA immediately north west of the state forest, TECs, EPBC Act listed Flora Species, Listed threatened and migratory fauna species habitats and Category B ESA: Endangered Regional Ecosystems'.</p> <p>The system also displays the assigned constraint level against the infrastructure type. We noted that all infrastructure types are either categorised 'very high' or 'no go'.</p>

5.2.1D	<p>Numerous databases of information from government, non-government, third party and QGC sources, including all available information and maps of MNES, have been utilised to create the ecological constraints layers. QGC will regularly update the constraints layer as databases are changed or refined in the future and to include preclearance and post clearance survey data.</p>	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to identify which sources of information have been used to develop ecological constraint layers - see line item below for those that should be included 2. Obtain these sources of information and QGC's ecological constraint maps 3. Compare sources of information to QGC's ecological constraint maps to determine if they have been used to inform the development of the constraint maps 3. Review ecological constraint maps to determine if they have been regularly updated and include preclearance and post clearance survey data 	<p>We obtained a walk through of the Proponent's Map Magic GIS system. We observed that the ecological survey layer in the system was updated with data from preclearance surveys.</p> <p>Based on discussions with GIS specialists supported by screenshots of the data sources, the MapMagic GIS systems includes all of the latest ecological datasets. QGC subscribes to the departmental websites to obtain email alerts when new datasets are published. The following datasets are utilised to create ecological constraint layers:</p> <ol style="list-style-type: none"> 1. Biodiversity Significant datasets and Regional Ecosystem data sourced from the DEHP. This includes constraint information from the Regional Ecosystem dataset and Zone 4a maps 2. Essential habitat, water course and wetland maps updated biannually sourced from the DNRM 3. Bioregional Corridors and Assessment of River Conditions Basins sourced from the DoE 4. Flora Fauna survey maps and Habitat maps updated annually from BAMB 5. Significant flora data from HERBRECS database sourced from Queensland Herbarium. <p>Preclearance data from surveys is uploaded to the GIS systems as evidenced from screenshots of the GIS system reviewed showing preclearance survey data uploaded in the ecological constraints layer. In addition, review of documentation shows that all CROME rules relating to Regional Ecosystems was updated with the new Regional Ecosystem dated (v8) published by DNRM in 2013.</p> <p>We reviewed a screenshot showing that the actual disturbance area from post clearance engineering survey data ('AsBuilt surveys') is uploaded to the GIS system..</p>	Yes
--------	--	---	--	-----

6.0 Updating Constraints				
6.0A	<p>Constraints information will be updated whenever:</p> <ul style="list-style-type: none"> • additional relevant information becomes available or • QGC assigns an alternative constraints ranking to an existing constraint <p>Examples of additional relevant information include:</p> <ul style="list-style-type: none"> • Changes to government databases that form the basis of constraint layers • Survey data collected in the field which may indicate the presence of constraints not previously identified or the absence of constraints identified through desktop mapping 	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders, including consulting with government database managers to cross-check updates. 2. Identify if changes to government databases that form the basis of constraints layers have become available or if survey data requiring constraints to be updated has become available. 3. If so, obtain a walkthrough from key stakeholders to determine if the information has been used to update constraints information. 4. Obtain and review evidence to confirm that constraints information has been updated. 	<p>Refer to 5.2.1D of this work paper</p>	<p>Refer to 5.2.1D of this work paper</p>
6.0B	<p>QGC will not assign an alternative constraints ranking to a constraint that will result in a conflict with any conditions of approval from State or Federal governments. Before a constraint ranking is reassigned, QGC will follow a rigorous process to ensure all relevant business groups authorise the change before the change is approved by the General Manager Environment or their delegate.</p>	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to identify the process to ensure business groups authorise any redesignation of a constraint ranking 2. Obtain and review a representative, random sample of no less than 10% of documentation to evidence approvals by business groups and the General Manager Environment (or their delegate) 3. Determine if approvals by business groups were obtained prior to approval by the General Manager Environment (or their delegate) 	<p>Based on discussions with Proponent representatives, it is understood that no ecological constraints ranking has been reassigned.</p>	<p>NA</p>
6.1 Field Surveys				
6.1A	<p>Constraints identified at a desktop level will be ground truthed through field preclearance surveys prior to authorisation of the final location or route of infrastructure.</p>	<ol style="list-style-type: none"> 1. Obtain a representative random sample of no less than 10% of field preclearance surveys 2. Obtain evidence of confirmation or update of constraints identified at desktop level following the results of the preclearance surveys 3. Obtain authorisation of the final location / route of infrastructure 4. Determine if constraints were confirmed / updated before authorisation was granted 	<p>We obtained a walkthrough of the QGC's GIS system, Map Magic with GIS specialists. We observed that the ecological survey layer in the system was updated with data from preclearance surveys by sighting the preclearance survey layer in GIS which shows the locations of constraints identified in the field. Comparison of this layer to other ecological datasets obtained from third party sources such as DoE and DERM, acts as a method to ground truth the desktop data.</p> <p>Based on discussions with Proponent representatives, constraints identified at a desktop level are outlined in a PACR document which is provided to the ecologist and details instructions for siting infrastructure in or within proximity to confirmed constraints. The preclearance survey report identifies and ground truths any constraints within proximity to any proposed development, eg TEC, RE's, watercourses, wetlands, protected plants, sensitive receptors as part of the PACR process. The ATW comprises a suite of documents and represents the milestone authorising the final location and / or route of infrastructure prior to progression into the construction phase.</p> <p>For a 10% sample of sites, we compared the date of preclearance surveys to the date of the associated ATW and found that in every case preclearance surveys were signed off prior to the ATW.</p> <p>Constraints are therefore identified at desktop level and ground truthed through field preclearance surveys prior to authorisation of the final location or route of infrastructure.</p>	<p>Yes</p>

6.1B	Pre-clearance surveys will be used to inform the constraints mapping system, which will then be utilised by construction personnel to locate infrastructure.	<ol style="list-style-type: none"> 1. Obtain a representative random sample of no less than 10% of field preclearance surveys 2. Obtain a representative, random sample of no less than 10% of constraint maps that covers the same area as the field preclearance surveys 3. Determine if constraint maps incorporate the findings of the preclearance surveys and that they have been utilised by construction personnel to locate infrastructure 	<p>A screenshot was obtained from the GIS Advisor, Spatial Services Team showing preclearance survey data points are assigned a constraints ranking depending on what is found during the survey eg. Habitat tree, Gilgai, Brigalow etc. The location of infrastructure is updated based on the constraints maps and the requirements of pegging party attendees.</p> <p>The Proponent provided GIS mapping of the project area showing that information is incorporated from preclearance surveys, and a walk through of the GIS systems showed that it is being used to produce constraints maps evidencing that the requirement of the criterion was met.</p> <p>However, a 10% sample of constraint maps could not be provided for the associated 10% sample of preclearance surveys as required by the agreed verification method.</p>	Undetermined
------	--	--	---	--------------

6.1C	An aspect of pre-clearance surveys will be the identification of any MNES and described potential impacts on MNES and measures to mitigate impacts.	1. Obtain a representative random sample of no less than 10% of field pre-clearance surveys 2. Review evidence to determine if they identify MNES as well as impacts and mitigation measures to identified MNES	The Environment Pegging Party Report form has provision for the ecologist to note the presence of Threatened Ecological Communities (TEC), Threatened Species following survey. We selected a 10% sample of survey reports where TEC and / or threatened species were found and noted that measures to mitigate impacts were included. Pre-clearance surveys consistently advise the contractor to avoid MNES, and where MNES cannot be avoided, clearing permits and vegetation offsets should be obtained before construction can begin.	Yes
6.1D	Pre-clearance ecological surveys will be conducted by ecologists approved by DSEWPC.	1. Obtain a representative random sample of no less than 10% of field pre-clearance surveys 2. Obtain and review evidence to demonstrate approval of the ecologists by DSEWPC	We reviewed a sample of 10% clearance surveys noting that Unidel employees perform pre-clearance surveys in every case. We reviewed a letter from the Assistant Secretary, Environment Assessment Branch, DOE approving ecologists from Unidel. Observation: it is noted that whilst the DOE removed the need to seek ongoing departmental approval for ecologists from Unidel, in approving the ecologist, the Department requires survey documentation to include the company name, and signing authority, and the qualification and experience of all ecologists who will undertake the work. The majority of pre-clearance surveys do not include the company name or signing authority, and none include the qualification and experience of the ecologist.	Yes
6.1E	Survey work for listed species and communities, including MNES, will be conducted in accordance with QGC's SSMP.	1. Hold discussions with key stakeholders to determine the extent and type of survey work for listed species and communities 2. Obtain a copy of the approved SSMP 3. Obtain a representative random sample of no less than 10% of survey reports for listed species and communities 4. Review evidence to determine if the surveys were conducted in accordance with SSMP requirements	Refer to 5.1.2F and 5.1.2G of the SSMP checklist	Refer to 5.1.2F and 5.1.2G of the SSMP checklist
6.1F	Constraints mapping will be continuously updated as additional information comes to hand and this will be used to guide site selection for all infrastructure throughout the life of the project.	1. Hold discussions with stakeholders to determine if constraint maps have been updated and if so, what information has been used to inform the updates including sources of new information, dates information was sourced etc. 2. Obtain a representative random sample of no less than 10% of ecological constraints maps that has been updated based on additional information	Refer to 5.2.1D of this work paper	Refer to 5.2.1D of this work paper
6.1G.i	All site assessments and field ecological surveys will: i. be undertaken in accordance with DSEWPC's survey guidelines in effect at the time of the survey;	1. Obtain a representative random sample of no less than 10% of site assessments and field ecological surveys 2. Review the assessments and surveys to determine if they are in accordance with the requirements of the Protocol	Based on samples selected, signed Pre-clearance Surveys have been prepared in accordance with DSEWPAC Condition 5g (iii) for EPBC Approval 2008/4398.	Yes
6.1G.ii	ii. take into account and reference previous ecological surveys undertaken in the area and relevant new information on likely presence or absence of MNES;	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Review of site assessments (such as fauna and habitat surveys) confirms that they take into account and reference previous ecological surveys (such as previous pegging party / pre-clearance surveys). Furthermore, review of site assessments and pre-clearance surveys confirms that relevant new information on the likely presence or absence of MNES have also been included. For example, a Threatened Fauna Species Survey for the Condamine State Forest reported that whilst the survey did not record the presence of Brigalow Scaly Foot on site, suitable habitat existed within the project area and mitigation measures were recommended during the operational phase to reduce further impacts.	Yes
6.1G.iii	iii. be undertaken by a suitably qualified ecologist approved by the DSEWPC;	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Refer to 6.1D of the Protocol Checklist	Refer to 6.1D of the Protocol Checklist
6.1G.iv	iv. document the survey methodology, results and significant findings in relation to MNES;	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Refer to AC&M5.7g.iv	Refer to AC&M5.7g.iv

6.1G.v	v. apply best practice site assessment and ecological survey methods appropriate for each listed threatened species, migratory species, their habitat and listed ecological communities.	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Based on review of a sample of site assessments and ecological surveys, surveys conducted by third parties cite the best practice survey methodology used to develop the survey report, generally aligned with published DERM guidelines. QGC site assessments such as Essential Habitat and Weed Surveys, Wetland Assessment and Quantification Reports are inconsistent in their reporting of methodology adopted. No of the QGC developed reports cited the use of best practice site assessment and ecological survey methods. Based on review of various site assessment types such as flora surveys, habitat assessments and fauna assessment, conducted both by QGC and third parties, there is a lack of consistency in whether assessments are conducted in accordance with best practice. For example, a third party, RPS, conduct surveys in accordance with the Survey Guidelines for Australia's Threatened mammals and Survey Guidelines for Australia's Threatened Reptiles developed by the Department of Environment (DoE). Other third parties and QGC surveys do not cite reference to best practice surveys. There is also inconsistency in how site assessments are presented, varying from template pro formas to informal notes.	No
	Note: Best practice includes applying the optimum timing and frequency of site assessments and surveys to determine presence or absence of listed threatened species or migratory species or their habitat, or a listed threatened ecological community.			
6.1G.vi	vi. apply the mapping of environmental constraints class Zone 4a (very high or no go); the infrastructure location requirements minimum no impact zones; impact risk zones; and the width requirements for linear infrastructure corridors described in Section 7.0;	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Review of preclearance surveys evidences that Zone 4a mapping (including EPBC listed flora, fauna and communities) infrastructure location requirements minimum no impact zones; impact risk zones; and the width requirements for linear infrastructure is applied at the preclearance phase. Review of site assessments such as flora and fauna surveys and habitat assessments do not explicitly stipulate if these requirements are applied; however, these assessments are conducted as a result of a need identified in the preclearance survey and so inherently the site assessments incorporate these requirements.	Yes
6.1G.vii	vii. publish reports on the internet 20 business days before clearance of native vegetation in an infrastructure impact area (i.e. any area where MNES are impacted) and provided reports to DSEPWC on request.	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Evidence could not be provided to demonstrate that site assessments and preclearance surveys are published on the internet 20 business days before clearance of native vegetation in an infrastructure impact area.	Undetermined
6.1.1 Recording Impacts to MNES				
6.1.1A.i	The results of the pre-clearance ecological survey will be recorded using portable GPS and GIS devices enabled with appropriate data collection forms, and/or will be recorded manually. All data collected from the field assessment will be uploaded to the QGC GIS system as soon as possible following field assessment. Following the field survey, field data will be converted into maps and a pre-clearance report will be prepared. All records of the pre-clearance survey will be maintained by QGC and made available for Agency review on request.	1. Obtain copies of GPS/GIS forms or manual forms showing the results of preclearance ecological surveys 2. Obtain copies of preclearance reports	We sighted the raw data from preclearance surveys uploaded into the GIS during the walkthrough of the GIS system. The preclearance data is applied to GIS maps of the proposed site showing an outline of the proposed infrastructure location and associated location of sensitive species / communities labelled with unique identifiers. Review of a sample of preclearance surveys shows that they include a report alongside the GIS map that lists the GIS point unique identifier, easting, northing and description of the data point. For example, 'western boundary of TEC Brigalow'.	Yes
6.1.1A.ii	Pre-clearance surveys will record any potential disturbances relating to each MNES, including potential habitat of listed fauna. In accordance with this Protocol MNES are either very high or no go constraints.	1. Obtain copies of preclearance reports 2. Review preclearance surveys to determine if they record disturbances to MNES 3. Check that MNES are either very high or no go constraints	Based on sampled Preclearance Surveys, surveys included record of any potential disturbances to MNES. For review of MNES categorised as very high or no go constraint, refer to 5.2.1C of this workpaper.	Yes
6.1.1A.iii	Where the constraint is no go, QGC will not conduct activities in the area containing MNES unless: 1) ground truthing and field ecological surveys demonstrate that siting infrastructure in that location will cause minimal adverse impact on MNES or ESAs, including habitat for listed species and/or MNES/habitat is recoverable or a suitable offset is agreed;	1. Obtain a representative, random sample of no less than 10% of constraints mapping 2. Determine if MNES are designated as no go or very high 3. Hold discussions with key stakeholders to determine if activities have been conducted in no go areas. 4. Where activities have occurred in no go areas obtain and review evidence to determine if the requirements of the Protocol have been met	Refer to 4.1B of this document	Refer to 4.1B of this document

6.1.1A.iv	2) it would be within disturbance limits; and	<p>1. Obtain a representative, random sample of no less than 10% of constraints mapping</p> <p>2. Determine if MNES are designated as no go or very high</p> <p>3. Hold discussions with key stakeholders to determine if activities have been conducted in no go areas.</p> <p>4. Where activities have occurred in no go areas obtain and review evidence to determine if the requirements of the Protocol have been met</p>	Refer to 4.1B of this document	Refer to 4.1B of this document
6.1.1A.v	3) other constraints preclude any alternative location.	<p>1. Obtain a representative, random sample of no less than 10% of constraints mapping</p> <p>2. Determine if MNES are designated as no go or very high</p> <p>3. Hold discussions with key stakeholders to determine if activities have been conducted in no go areas.</p> <p>4. Where activities have occurred in no go areas obtain and review evidence to determine if the requirements of the Protocol have been met</p>	Refer to 4.1B of this document	Refer to 4.1B of this document
6.1.1B	<p>In relation to MNES specifically, proposed infrastructure locations will be determined in accordance with the following:</p> <p>I. Preferentially avoid native vegetation that constitutes a listed ecological community and/or may provide habitat for listed species and utilise previously cleared or previously utilised areas;</p> <p>II. Exclude exploration and production wells from within areas identified as environmental constraint class Zone 4a unless their location within environmental constraint class Zone 4a is justified as an exception given other constraints and the impact on any MNES will be minimal, short term and recoverable; and</p> <p>III. either:</p> <p>a. exclude other non linear infrastructure from the no impact zone; or</p> <p>b. where the location of other non linear infrastructure in the no impact zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be minimal, short term and recoverable, or no adverse impact on any MNES, including habitat for any listed species;</p> <p>IV. either:</p> <p>c. exclude linear infrastructure from the impact risk zone; or</p> <p>d. where the location of linear infrastructure in the impact risk zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be minimal adverse impact on any MNES, including habitat for any listed species.</p>	Refer to 4.1C of this document	Refer to 4.1C of this document	Refer to 4.1C of this document
6.1.1C.i	Where the constraint is very high, QGC will seek alternative locations for proposed infrastructure in that location.	Hold discussions with key stakeholders to determine if alternative locations were sought for infrastructure proposed in very high constraint areas	Based on discussions with a Proponent representative, where constraints are identified as very high, QGC seek to locate the infrastructure to an alternate areas of a lesser constraint where possible. However, sometimes with trunk lines, access roads and the UIC for example, it is difficult to avoid such areas.	Yes
6.1.1C.ii	Alternative locations may be recommended by the DSEWPAC approved ecologist conducting pre-clearance surveys and by the QGC's environmental officers based on desktop analysis of environmental and other constraints.	Hold discussions with key stakeholders to determine which parties recommended alternative locations	Based on discussions with a Proponent representative, alternative locations are recommended by the ecologist conducting pre-clearance surveys and by the QGC's environmental officers based on desktop analysis of environmental and other constraints.	Yes

6.1.1C.iii	Where competing constraints result in the preferred location for infrastructure being in an area containing MNES, then the approvals process described in Section 3.0 will be followed.	Hold discussions with key stakeholders to determine if the approvals process was followed in instances where competing constraints were identified in the preferred location being a MNES	Based on discussions with Proponent representatives, competing constraints may occur for a trunkline, or the UIC for example. In the case of the UIC there were competing constraints due to land tenure boundaries, State Forest boundaries and the integral nature of the UIC infrastructure. As a result the UIC was located in an area that partially impacted on TEC Brigalow. This is discussed AFLR stage to determine if there are any alternatives or offset are required. Review of the preclearance survey for for the trunkline corridor notes the location was proposed in a remnant brigalow forest, an endangered floral habitat. Because the mapped remnant area extended approximately 1km either side of the crossing point, relocation was determined to be 'financially undesirable'. Therefore, 2ha was impacted requiring referral to both State and Federal Governments for clearing permits and vegetation offset conditions. Review of the associated AFLR shows an instruction for the contractor to inform the field FEO of the final quantity cleared in the area as well as requirement for a fauna spotter to undertake additional preclearance survey to identify further habitat features that may need management. The final disturbance of 2.05ha was recorded in the disturbance spreadsheet.	Yes
6.1.1C.iv	This requires all proposed infrastructure locations to be approved by various discipline managers within QGC.	Obtain and review evidence to determine if proposed infrastructure locations have been approved by various discipline managers within QGC	Based on review of ATWs, all proposed infrastructure locations are approved by various discipline managers within QGC depending on the scope of the development. These include but are not limited to: • Environment • Commercial • Tenures & Licensing • Cultural Heritage • Land • Social Performance • Operations • Subsurface • Engineering	Yes
6.1.1C.v	Where a potential impact to MNES is expected prior to the disturbance occurring, QGC will record the expected disturbance by reference to: • the proposed location, specific site and type of infrastructure or activity;	1. Obtain records of expected disturbances to MNES 2. Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, the proposed location, specific site and type of infrastructure or activity is identified via infrastructure maps included in the ATW. The maps overlay the location of identified MNES. Based on review of Record of Impacts documents, the proposed location, specific site and type of infrastructure or activity is shown in appended maps.	Yes
6.1.1C.vi	• each MNES subject to disturbance;	1. Obtain records of expected disturbances to MNES 2. Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, each MNES subject to disturbance is noted in the preclearance survey and ATW. The MNES subject to disturbance is recorded in the Record of Impacts to MNES documents.	Yes
6.1.1C.vii	• the related site assessment or field ecological survey documentation and recommendations, or the decision that the particular MNES was presumed to be present;	1. Obtain records of expected disturbances to MNES 2. Obtain and review evidence to determine if the requirements of the Protocol have been met	Based on review of Record of Impacts to MNES documents, the decision that MNES was presumed to be present is based on RE mapping at desktop level ground truthed by undertaking preclearance surveys. Preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, show that a requirement is specified for the contractor to conduct additional detailed surveys to identify further habitat features which will require management prior to, during or after vegetation clearing / construction.	Yes
6.1.1C.viii	• the disturbance limit set under Condition 25 of the DSEWPAC gas field approval;	1. Obtain records of expected disturbances to MNES 2. Obtain and review evidence to determine if the requirements of the Protocol have been met	The Record of Impacts documents note the disturbance limit set under Condition 25 of the DSEWPAC gas field approval for each EPBC listed habitat	Yes

6.1.1C.ix	<ul style="list-style-type: none"> the total area of predicted disturbance; 	<ol style="list-style-type: none"> Obtain records of expected disturbances to MNES Obtain and review evidence to determine if the requirements of the Protocol have been met 	<p>Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, the total area of predicted disturbance is identified in terms of area disturbed or number of plants. Three exceptions were noted where the preclearance surveys did not include the predicted disturbance to MNES. However, it is understood that quantifying the predicted disturbance cannot practically occur during the preclearance stage in every instance due to time constraints, in which case the preclearance survey recommends that a follow up quantification survey is conducted.</p> <p>The Proponent completes Records of Impacts documentation following the preclearance survey and development of the ATW document. Based on review of Record of Impacts to MNES documents, the predicted disturbance is specified in every case. On this basis the Proponent complies with this criterion.</p>	Yes
6.1.1C.x	<ul style="list-style-type: none"> the remaining disturbance limit for each affected MNES; 	<ol style="list-style-type: none"> Obtain records of expected disturbances to MNES Obtain and review evidence to determine if the requirements of the Protocol have been met 	The Records of Impacts documents refer to the disturbance spreadsheet for the remaining disturbance limit for each affected MNES, which tracks the cumulative actual disturbance limit for each affected MNES against the permissible disturbance limit.	Yes
6.1.1C.xi	<ul style="list-style-type: none"> the reasons for the decision including justification for the action taken, description of the efforts taken to avoid impact, and explanation why other constraints might justify the impact on MNES; 	<ol style="list-style-type: none"> Obtain records of expected disturbances to MNES Obtain and review evidence to determine if the requirements of the Protocol have been met 	We reviewed preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES. Whilst the information requirements of this criterion were not provided in the majority of cases, the Record of Impacts documents provide this information in every case. Justifications cited are based on the selection of the less environmentally damaging option given other localised constraints such as stream order 1 watercourses in the vicinity, or due to landholder constraints or site specific engineering constraints.	Yes
6.1.1C.xii	<ul style="list-style-type: none"> actions and commitments by the proponent to avoid / prevent, remediate, rehabilitate, or make good any unauthorised disturbance. 	<ol style="list-style-type: none"> Obtain records of expected disturbances to MNES Obtain and review evidence to determine if the requirements of the Protocol have been met 	Refer to AC&M13.1.viii	Refer to AC&M13.1.viii
6.1.1D.i	Following the disturbance activities, QGC will conduct a survey to determine the actual extent of disturbance to MNES and record the expected disturbance by reference to:	<ol style="list-style-type: none"> Obtain a representative, random sample of no less than 10% of surveys conducted following disturbance activity Check that they describe the extent of disturbance to MNES 	<p>The contractor conducts an As Built survey to determine the actual disturbance area of each development. Based on discussions with a Proponent representative, the contractor undertakes the As Built survey using their own engineering surveyors which is then submitted to QGC as part of the completion process to obtain Practical Completion. Review of the As Built surveys show that these are engineering drawings showing the actual specific locations of different types of infrastructure including a summary of the disturbance area impacting the MNES.</p> <p>Whilst As Built surveys were reviewed, a 10% population of As Built surveys could not be provided to assess compliance with this item</p>	Undetermined
6.1.1D.ii	<ul style="list-style-type: none"> the actual location, specific site and type of infrastructure or activity; 	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Review of the Proponent's disturbance spreadsheet notes the general location (the Lot number) of the expected disturbance. However, review of As Built surveys conducted by the contractor following completion of the development shows the actual location, specific site and type of infrastructure or activity.	Yes
6.1.1D.iii	<ul style="list-style-type: none"> each MNES subject to disturbance; 	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Review of the Proponent's disturbance spreadsheet show each MNES subject to disturbance.	Yes
6.1.1D.iv	<ul style="list-style-type: none"> the related site assessment or field ecological survey documentation and recommendations, or the decision that the particular MNES was presumed to be present; 	Obtain and review evidence to determine compliance with the requirements of the Protocol.	We note that the information required by this criterion is recorded prior to disturbance activities as recorded in the Records of Impacts documents (refer to 6.1.1C.vii). Based on discussions with a Proponent representative, we understand that the only circumstance where this information would change after a disturbance activity is if the contractors had cleared an area greater than planned. However, this situation has not arisen since the Proponent surveys a greater area than required at the preclearance stage. On this basis, the requirement to record the information described in this criterion is not applicable.	NA
6.1.1D.v	<ul style="list-style-type: none"> the disturbance limit set under Condition 25 of the DSEWPAC gas field approval; 	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Review of the Proponent's disturbance spreadsheet notes the disturbance limit set under Condition 25 of the DSEWPAC gas field approval for each MNES.	Yes

6.1.1D.vi	• the total area of actual disturbance;	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Review of the As Built surveys show that these are engineering drawings showing the actual disturbance areas and specific locations of different types of infrastructure. The actual disturbance areas are then transferred to QGC disturbance spreadsheet that tracks actual versus predicted disturbance.	Yes
6.1.1D.vii	• the remaining disturbance limit for each affected MNES;	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Review of QGC's disturbance spreadsheet notes the remaining disturbance limit for each affected MNES.	Yes
6.1.1D.viii	• the reasons for the decision including justification for the action taken, description of the efforts taken to avoid impact, and explanation why other constraints might justify the impact on MNES;	Obtain and review evidence to determine compliance with the requirements of the Protocol.	We note that the information required by this criterion is recorded prior to disturbance activities as recorded in the Records of Impacts documents (refer to 6.1.1C.xi). Based on discussions with a Proponent representative, we understand that the only circumstance where this information would change after a disturbance activity is if the contractors had cleared an area greater than planned. However, this situation has not arisen since the Proponent surveys a greater area than required at the preclearance stage. On this basis, the requirement to record the information described in this criterion is not applicable.	NA
6.1.1D.ix	• actions and commitments by the proponent to remediate, rehabilitate, or make good any unauthorised disturbance.	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Based on discussions with a Proponent representative, no unauthorised clearing of MNES have occurred to date (as of November 2014). If this were to occur, it would be identified via the site inspection reporting process and recorded as a non-compliance before being elevated to the QGC Compliance Team who would develop a remediation plan.	NA
6.1.1D.x	Predicted disturbances to MNES will be reconciled to actual disturbances and records updated to reflect actual disturbances.	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Predicted disturbances to MNES are reconciled to actual disturbances in QGC's disturbance spreadsheet.	Yes
6.1.1D.xi	All information recorded during surveys and in justifying disturbances to MNES will be recorded to a standard that can be independently audited.	Obtain and review evidence to determine compliance with the requirements of the Protocol.	The Proponent completes Records of Impacts documentation following the preclearance survey and development of the ATW document. For a sample of instances where infrastructure is proposed to impact MNES, the associated Records of Impacts documents record information to a standard which can be independently audited – the information is clear, available, traceable and recorded in a timely manner.	Yes
7.0 Mitigation Measures				
7.0A	Conditions of approval for the Project, from both DSEWPAC and DERM describe mitigation measures when infrastructure is proposed to be located in certain constraint zones. QGC has incorporated these mitigation measures into this Protocol and in the SSMP and RRRMP.	1. Obtain conditions of approval for the Project issued by DSEWPAC and DERM 2. Review and determine if mitigation measures described in the conditions have been incorporated into the Protocol, SSMP and RRRMP	Environmental Authority's issued by DERM for various QCLNG project areas detail conditions categorised as the following: General Conditions, Water, Dams, Land, Noise, Air, Waste, Rehabilitation, Stimulation Activities, Community, Notification procedures and Definitions. Those that relate to 'Land' include common conditions to the EPBC permit such as: 1. Prior to conducting activities that involve significant disturbance to land, an assessment must be undertaken of the condition, type and ecological value of any vegetation in such areas 2. This assessment must be undertaken by a suitably qualified person 3. The holder of the environmental authority must be able to demonstrate all reasonable and practical measure were taken to avoid, minimise and mitigate impacts on areas of vegetation or other areas of ecological value. Other conditions in the DERM permit concerning Land relate to Environmentally Sensitive Areas (ESA) which are State controlled and out of scope. Also included under the 'Land' category are general procedures regarding Fauna Management. These procedures are included in the Protocol, SSMP and RRRMP. The General Conditions cover aspects such as use of GIS, determining the proposed maximum area of disturbance, generation of a rehabilitation plan, development of a monitoring program, have been appropriately included in the Protocol, SSMP and RRRMP.	Yes

7.1 DSEWPAC				
7.1A	<p>Locating infrastructure in accordance with the Protocol is the primary process for avoiding or minimising impacts from the project. There may be circumstances where competing constraints result in infrastructure being located in a high or very high constraint zones. Where competing constraints result in infrastructure being located where it may have a direct or indirect impact on MNES (classified as a very high ecological constraint) then QGC will:</p> <p>I. preferentially avoid native vegetation that constitutes a listed ecological community and/or may provide habitat for listed species and utilised previously cleared or previously utilised areas;</p> <p>II. exclude exploration and production wells from within areas identified as environmental constraint class Zone 4a (very high or no go) unless their location within environmental constraint class Zone 4a is justified as an exception given other constraints and the impact on any MNES will be minimal, short term and recoverable; and</p> <p>III. either</p> <p>a. exclude other non linear infrastructure from the no impact zone; or</p> <p>b. where the location of other non linear infrastructure in the no impact zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be minimal, short term and recoverable, or no adverse impact on any MNES, including habitat for any listed species;</p> <p>IV. either</p> <p>c. exclude linear infrastructure from the impact risk zone; or</p> <p>d. where the location of other non linear infrastructure in the impact risk zone is justified given other constraints and cannot be avoided, only authorise the siting of that infrastructure in that zone where field ecological surveys demonstrate that there will be minimal, short term and recoverable, or no adverse impact on any MNES, including habitat for any listed species.</p>	Refer to 4.1C of this document	Refer to 4.1C of this document	Refer to 4.1C of this document
7.1B	<p>Where infrastructure is located in accordance with the above conditions, pre-clearance surveys conducted by a DSEWPC approved ecologist will be used to:</p> <ul style="list-style-type: none"> • identify previously cleared or previously utilised areas; • determine the degree of impact on MNES (i.e. whether minimal, short term and recoverable or no adverse impacts). 	<ol style="list-style-type: none"> 1. Obtain a representative random sample of no less than 10% of copies of pre-clearance surveys 2. Determine if the pre-clearance surveys identify previously cleared or utilised areas, and determine the degree of impact on MNES 	Based on sampled Preclearance Surveys, previously cleared or utilised areas have been identified and the degree of impact on MNES has been determined in terms of the likely area or number of individual plants affected.	Yes
7.1C.i	<p>Where infrastructure will be located in areas of MNES then:</p> <p>i. all linear disturbance within environmental constraints class Zone 4a (very high or no go) for MNES and the impact risk zone will be:</p> <p>I. limited to 6 metres in width for single lane track;</p>	<ol style="list-style-type: none"> 1. Hold discussions with key stakeholders to identify linear infrastructure located in areas of MNES 2. Obtain and review evidence such as development drawings to identify if linear infrastructure is located within the disturbance corridors specified by the Protocol 3. Conduct a site visit to observe if linear infrastructure is located within the disturbance corridors specified by the Protocol 	Refer to AC&M 5.5e.i.1	Refer to AC&M 5.5e.i.1
7.1C.ii	<p>II. limited to 15 metres if there are one or two parallel gas or water gathering lines;</p>	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Based on review of pre-clearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, where there are one or two parallel gas or water gathering lines, the width is limited to 15m.	Yes
7.1C.iii	<p>III. limited to 20 metres if there are three, four, or five parallel gas or water gathering line;</p>	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Based on review of pre-clearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, no instances were noted where three, four, or five parallel gas or water gathering lines were proposed.	Undetermined

7.1C.iv	IV. limited to 25 metres if there are six, seven or eight parallel gas or water gathering lines;	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, no instances were noted where six, seven or eight parallel gas or water gathering lines were proposed.	Undetermined
7.1C.v	V. limited to 30 metres if there are greater than eight parallel gas or water gathering lines.	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, no instances were noted where than eight parallel gas or water gathering lines were proposed.	Undetermined
7.1C.vi	ii. gas and water trunkline right of way, water distribution pipeline rights of way, the Upstream Infrastructure Corridor (UIC), and other major linear infrastructure disturbance corridors within environmental constraints class Zone 4a and the impact risk zone must be: I. limited to 30m in width where there are one or two gas and water trunklines, underground 33kV power lines and fibre optic cables in parallel;	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Refer to AC&M 5.5e.ii.I	Refer to AC&M 5.5e.ii.I
7.1C.vii	II. limited to 30m plus an additional 4 metres for every additional gas or water trunkline in parallel with the initial one or two gas or water trunklines, underground 33kV power lines and fibre optic cable;	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, no instances were noted where more than two trunklines were proposed with underground 33kV power lines and fibre optic cable.	Undetermined
7.1C.viii	III. limited to disturbance in the corridor described for the UIC.	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, the impact is limited to disturbance in the corridor described for the UIC	Yes
7.1C.ix	iii. Where feasible, gas trunklines, pipelines for associated water and other transmission lines will be collocated to reduce total disturbance on MNES.	Obtain and review evidence to determine compliance with the requirements of the Protocol.	Based on review of preclearance surveys and ATW documentation for a sample of instances where infrastructure is proposed to impact MNES, trunklines, pipelines and other transmission lines are frequently collocated, typically along pre-existing access routes.	Yes
7.3 Species and Ecological Community Management Plans				

7.3A	<p>QGC has prepared species and ecological community management plans for all species and ecological communities listed as MNES (the SSMP). Plans describe:</p> <ul style="list-style-type: none"> • relevant avoidance and mitigation measures • measures for protecting each listed threatened species and migratory species and their habitat, <p>Plans will be prepared for each listed threatened ecological community not previously assessed by QGC, should one or more be found in the project area at any time over the life of the project. Any such management plans will be developed in a timeframe to be approved by the DSEWPAC. Notification of additional MNES found will be provided to DSEWPAC in writing within 10 business days.</p> <p>This Protocol has been developed to minimise impacts on MNES and other constraints.</p>	<ol style="list-style-type: none"> 1. Review a representative random sample of 10% of ecological surveys conducted to identify the threatened species and ecological communities found 2. Obtain a copy of the SSMP 3. Determine if the threatened species and ecological communities identified in the 10% sample of ecological surveys are included in the SSMP 4. Review the SSMP to determine if it includes avoidance and mitigation measures and measures for protecting each listed threatened species and migratory species and their habitat 5. Hold discussions with key stakeholders to determine if the DSEWPAC approved a timeframe in which the SSMP should be developed 6. Obtain and review evidence of the timeframe approved by DSEWPAC 7. Compare to the SSMP to determine if the SSMP was developed within the timeframe specified 8. Hold discussions with key stakeholders to determine if additional MNES were found 9. Review database and/or other records to confirm if additional MNES were found 10. If applicable, obtain and review evidence to determine if notification of additional MNES were provided to DSEWPAC within 10 business days 	<p>Based on discussions with Proponent representatives, Koala is the only additional MNES species found during operational activities that does not have a species management plan provided in the SSMP.</p> <p>A Proponent representative stated that QGC developed an SMP for Koala and notified DoE of the sighting within 10 business days.</p> <p>We reviewed a letter to Peter Blackwell, Compliance and Enforcement Branch, DoE notifying that a new MNES was found in the area of Hinchley State Forest on 18 October 2014. This is 10 business days following the discovery of the MNES and therefore in compliance with the condition. An Koala SMP is appended to the letter.</p> <p>Based on sampled Preclearance Surveys, threatened species and ecological communities identified are included in the SSMP.</p> <p>We reviewed the disturbance spreadsheet and cross referenced all Listed Flora, TEC and EPBC listed fauna species with the SSMP noting that all species had a corresponding Species Management Plan.</p>	Yes
------	--	---	--	-----

8.0 Approval and Review of the Protocol				
8.0A	QGC will submit the Protocol for the approval of the Minister for DSEWPAC.	Refer to section 20.1 of the Audit Criteria and Methodology	Refer to section 20.1 of the Audit Criteria and Methodology	Refer to section 20.1 of the Audit Criteria and Methodology
8.0B	Commencement of gas field development will not occur without written approval of the Protocol.	Refer to section 20.2 of the Audit Criteria and Methodology	Refer to section 20.2 of the Audit Criteria and Methodology	Refer to section 20.2 of the Audit Criteria and Methodology
8.0C	QGC may undertake 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 MNES, and only if QGC has notified DSEWPAC in writing before an activity is undertaken.	Refer to section 20.3 of the Audit Criteria and Methodology	Refer to section 20.3 of the Audit Criteria and Methodology	Refer to section 20.3 of the Audit Criteria and Methodology
8.0D	The approved Protocol must be implemented.	n/a: implementation of the approved Protocol is determined by this Protocol Checklist	n/a: implementation of the approved Protocol is determined by this Protocol Checklist	n/a: implementation of the approved Protocol is determined by this Protocol Checklist
8.0E	The Protocol and related plans will be reviewed and updated to take into account the findings of the Cumulative Impact Assessment Report required by the Queensland Government; before each major stage of gas field development; or following a written request from DSEWPAC.	Refer to section 21.1 of the Audit Criteria and Methodology	Refer to section 21.1 of the Audit Criteria and Methodology	Refer to section 21.1 of the Audit Criteria and Methodology
8.0F	Reviewed and updated Protocols and plans will be submitted for the Minister for DSEWPAC's written approval.	Refer to section 21.2 of the Audit Criteria and Methodology	Refer to section 21.2 of the Audit Criteria and Methodology	Refer to section 21.2 of the Audit Criteria and Methodology
8.0G	Once approved, updated Protocols and plans must be implemented.	Refer to SSMP Checklist	Refer to SSMP Checklist	Refer to SSMP Checklist
8.0H	QGC's review of the Protocol will take into account all relevant studies, policies, standards, guidelines and advice relating to CSG activity published or provided to the proponent by the Commonwealth or Queensland governments, or published or provided by other proponents undertaking similar activities, or published or provided by other parties, including any findings of an audit against conditions, or plans or other documentation required under the conditions of approval.	Refer to section 22.1 of the Audit Criteria and Methodology	Refer to section 22.1 of the Audit Criteria and Methodology	Refer to section 22.1 of the Audit Criteria and Methodology
8.0I	DSEWPAC may require through a request in writing that the Protocol and related plans be revised or amended before approval.	Refer to section 23.1 of the Audit Criteria and Methodology	Refer to section 23.1 of the Audit Criteria and Methodology	Refer to section 23.1 of the Audit Criteria and Methodology
8.0J	Any such request must be acted on within the time frame specified.	Refer to section 23.2 of the Audit Criteria and Methodology	Refer to section 23.2 of the Audit Criteria and Methodology	Refer to section 23.2 of the Audit Criteria and Methodology
8.0K	The approved Protocol will be incorporated into the proponent's management procedures, operational plans and other relevant documentation and kept current for the life of the project.	Refer to section 24.1 of the Audit Criteria and Methodology	Refer to section 24.1 of the Audit Criteria and Methodology	Refer to section 24.1 of the Audit Criteria and Methodology

Appendix 4: Evidence list

A description of the evidence to support audit findings of compliance or non-compliance is as follows:

1. Constraints Planning & Field Development Protocol
2. Significant Species Management Plan including Significant Species Management Plans
3. Remediation, Rehabilitation, Recovery and Monitoring Plan
4. Offset Plan
5. Contractor Rehabilitation Plans
6. Project planning documents showing clearing dates
7. Contractor Environmental Control Plan / Environmental Management Plans
8. Koala Significant Species Management Plan
9. Bushfire Risk Management Plan
10. Coal Seam Gas Water Management Plan
11. A 10% sample of Upstream Development Process documentation including:
 - Project Access & Clearance Requests (PACR)
 - Preclearance Surveys / Pegging Party Reports (PEC)
 - Access To Work documents (ATW)
 - Post Survey Landholder Maps (PSLM)
 - Agreement of Final Layout Requests (AFLR)
12. A 10% sample of site assessments and field ecological surveys conducted by the third parties and the Proponent, including:
 - Threatened Ecological Community (TEC) confirmation surveys
 - Quantification Surveys
 - Vegetation Assessments
 - Wetland Reports
 - Essential Habitat Assessments
 - Flora Survey Reports
 - Fauna Survey Reports and Habitat Assessments
13. 10% sample of site inspection reports
14. 10% sample of Environmental Authorities issued by DEHP
15. 10% sample of clearing permits issued by DEHP
16. Zone 4a and 4p maps
17. TEC maps from the Proponent's MapMagic GIS system
18. BAMB mapping
19. Output from the CROME constraints database within the MapMagic GIS system
20. Record of Impact documents describing instances of proposed impacts to MNES
21. As Built Surveys
22. Weed surveys
23. Ecologist approval letters from DSEWPaC
24. Emails showing inspection reports reviewed by the FES

25. Letter from DSEWPaC approving the Protocol
26. Letter from DSEWPaC approving the SSMP
27. Letter from Coordinator General approving the Protocol
28. Letter from the Proponent to DSEWPaC notifying the date of commencement of the action in the gas fields
29. Letters to the Coordinator General, DERM and DSEWPaC requesting SSMP approval
30. Letter to the DoE notifying discovering of Koala
31. Letter to DEHP providing notification of environmental incident
32. Emails confirming review and approval of PACR
33. Transmittal confirmations showing issue of PACRs to internal stakeholders
34. Email evidence that senior management are kept informed of threatened flora found in proposed clearance areas
35. Screenshots from GIS showing preclearance constraint data
36. Screenshots showing web upload dates of preclearance surveys
37. Screenshots showing version of environmental datasets loaded into GIS
38. Screenshot of the weed database
39. The Proponent's organisation chart
40. The Proponent's Environmental Field Constraints Assessment Guideline
41. GIS Verification Spreadsheet / disturbance spreadsheet
42. The Cumulative Impact Report
43. Upstream Development Process Snake Diagram
44. Fauna Management Plan
45. Rehabilitation permits for spotter catchers
46. Wildlife Emergency Response and Rescue Contacts notice
47. Fauna Spotter Catcher Reports
48. Template contractor ITT specification
49. CROME Constraint Modification report
50. Philotheca sporadica Translocation Management Plan
51. Final Report: Philotheca sporadica
52. Philotheca sporadica, Population Genetics and Propagation, Final report prepared by the University of the Sunshine Coast for QCLNG
53. Internal Audit Report for Gathering Construction
54. Evidence of desktop review of government flora databases