

Coal Seam Gas and QPWS



Two key roles -

- Land Management, and
- Wildlife Management

Land Management

- QPWS/DERM is a **public landholder** under Petroleum and Gas legislation.
- CSG activities are being carried out on QPWS managed land - **State forests and timber reserves** (Forestry Act), **resources reserves** (NCA), **Land Act reserves and USL**.
- CSG production is not permitted on national parks (all classes), conservation parks and forest reserves.
- Current extent of CSG related infrastructure in Western Region – 132 existing well sites (covering 1 hectare each) and 261 km of pipeline installed in 19 separate State Forests.
- Authorities for a further 251 wells and 362 km of pipeline are in the process of being processed.
- Further proposals will see several hundred new gas wells on QPWS land over the next 2 years, plus access tracks; gathering and transmission pipeline alignments; water, communications and power lines; and associated infrastructure in both Western and Capricornia Regions.
- **Key land management issues:**
 - overhead powerlines and 'fracking' activities proposed on QPWS estate,
 - growth in workload (inspection, assessment, administration and coordination roles),
 - cumulative impacts of clearing and disturbance,
 - fire management, commercial timber and quarry materials
 - impacts on existing users
 - compensation and offset requirements,
 - need for WoG review of land access framework to better reflect State's legislative responsibilities as a land manager as distinct from environmental regulator.

Wildlife Management

- QPWS administers provisions of the *Nature Conservation Act 1992* with respect to management of protected wildlife on all lands (other than protected areas).
- A range of requirements in relation to CSG activities, these include
- **Clearing Permits** for the take of protected plants (general exemptions for the CSG industry for take of least concern plants, clearing permits required for endangered, vulnerable or near threatened (EVNT) plants, and offset requirements)
- **Species Management Programs** (general exemptions for tampering with an animal breeding place of least concern species, authority required for tampering with the breeding place of an EVNT protected animal or special least concern animal)
- **Rehabilitation Permit – Spotter Catcher** (for parties to catch and relocate fauna which may be at direct threat to harm from the development.
- **Damage Mitigation Permit** – Lethal and Non-Lethal (for the removal of animals and plants which pose a potential threat to people or may incur a direct economic loss due to the activity of the animal towards the activity).
- Also assessment of wildlife management issues in Environmental Impact Statements and recommendations for the Coordinator General's Reports.

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- CSG production not permitted on national park (all classes), conservation park or forest reserve.
- Current extent of CSG infrastructure in Western Region – 132 existing well sites (approx 1 ha each) and 261 km of pipeline installed in 19 separate State Forests.
- Proposals for a further 251 wells and 362 km of pipeline are in the process of being assessed and processed by regional staff.
- Further industry growth will see several hundred new gas wells on QPWS lands over the next 2 years, plus access tracks; gathering and transmission pipeline alignments; water, communications and power lines; and associated infrastructure in both Western and Capricornia Regions.
- **Key land management issues:**
 - overhead powerlines and ‘fracking’ activities proposed on QPWS estate,
 - growth in workload (inspection, assessment, administration and coordination roles),
 - cumulative impacts of clearing and disturbance,
 - fire management, commercial timber and quarry materials
 - impacts on existing users and authority holders
 - compensation and offset requirements,
 - Impact on future protected areas – e.g. for example Lonesome Holding (USL) and Expedition Resources Reserve (both held by QPWS as additions to Expedition NP).

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Department of National Parks, Recreation, Sport and Racing
DIRECTOR-GENERAL BRIEFING NOTE

sch4p3(3) Prejudice the protection of an individuals right to privacy

Approved Not Approved Noted
Further information required

DG...

Dated 14/5/12

TO: Director-General, National Parks, Recreation, Sport and Racing

SUBJECT: Coal Seam Gas Industry activities on lands managed by the Queensland Parks and Wildlife Service (QPWS)

RECOMMENDATION

It is recommended that the Director-General:

note the information in this brief about coal seam gas activities on lands managed by QPWS.

BACKGROUND/KEY ISSUES

- The Queensland Parks and Wildlife Service (QPWS) manages more than 12 million hectares of land including:
 - those classes of protected area under the *Nature Conservation Act 1992* that are owned by the State (**national park (scientific)**, **national park (recovery)**, **conservation park** and **resources reserve**);
 - State forests, timber reserves and forest reserves** under the *Forestry Act 1959*, (while forest reserves are declared under the *Nature Conservation Act 1992* as a step towards conversion to a protected area tenure (for example, national park or conservation park), State forests that are declared as forest reserves continue to be managed under the *Forestry Act 1959* until conversion takes place);
 - a number of blocks of **freehold land** and **unallocated state land (USL)** that are intended for conversion to another land tenure (e.g. a new national park); and
 - some **reserves** for departmental and community purposes under the *Land Act 1994* for which QPWS is the sole or joint trustee.
- These lands are managed by QPWS for a range of purposes in accordance with the relevant legislation, principally conservation, recreation/tourism and forestry.
- Resource industry activities, including coal seam gas (CSG) exploration and production, are prohibited on national parks (all classes); conservation parks and forest reserves under sections 27 and 70QA of the *Nature Conservation Act 1992*. However, resource industry activities, including CSG activities, may be carried out on resources reserves, freehold land, unallocated state land, Land Act reserves, State forests and timber reserves.
- Mining activities are the subject of a separate briefing note (CTS 05078/12).

Current CSG industry activity

- The CSG industry is growing rapidly, with four liquefied natural gas (LNG) processing/export facilities being built on Curtis Island by Gladstone Liquefied Natural Gas (GLNG)/Santos; Australia Pacific Liquefied Natural Gas (APLNG)/Origin; Queensland Gas Company (QGC) and Arrow Energy.
- These projects have been declared as 'significant projects' under the *State Development and Public Works Organisation Act 1971* and are summarised in Attachment A.
- In the past a limited number of petroleum and gas activities have been carried out on state forests, particularly in south – western Queensland, for many years, however over the last five years activity on QPWS managed lands has increased substantially and this growth is expected to continue.
- There are currently 345 existing well sites (generally occupying one hectare per well) and 250 km of pipeline installed in 21 state forests in QPWS Western Region. Proposals for a further 180 wells and 100 km of pipeline are currently being assessed.

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- In addition to well sites, activity on QPWS managed lands in the gas fields also includes survey and exploration activities; and the construction of roads, access tracks; gas and water pipelines; communications infrastructure and power lines.
- Transmission pipelines being constructed to transport gas from the gas fields to processing and export facilities on Curtis Island also cross several parcels of QPWS land in Capricornia Region including Callide Timber Reserve, Targinie State Forest, and Expedition State Forest. Proposals currently totalling 32 km of transmission pipeline are currently being assessed by QPWS.

Regulatory framework

- CSG activities are conducted under the provisions of petroleum authorities issued under the *Petroleum Act 1923* ('the PA') or the *Petroleum and Gas (Production and Safety) Act 2004* ('the P&G Act'), and environmental authorities issued under the *Environmental Protection Act 1994* ('the EP Act'). State forests, timber reserves and resources reserves are classed as 'Category C Environmentally Sensitive Areas' for the purposes of EP Act environmental authorities.
- Importantly, the petroleum and gas legislation also establishes various rights and responsibilities (both for petroleum authority holders and public land authorities) in relation to activities on public lands. These include for example providing notice of entry to owners and occupiers, the ability of public land authorities to condition activities, and provision for compensation to be paid to the State for compensatable effects caused by petroleum activities.
- Public land authorities are defined under the P&G Act and the PA as the authority charged with control of the land under an Act, or the chief executive of the department administering the Act under which entry to the land is administered. QPWS and/or the Director General DNPRSR are the public land authority (and land owner) in relation to QPWS managed lands and therefore have the right to further condition activities occurring on these lands beyond standard conditions contained in environmental authorities. This is an important feature of current management of CSG activities, as the environmental authorities are not set up to address land management issues – these are to be agreed between the companies and the individual landholder – in the case of State forests, these agreements are predominantly in the form of occupation permits.
- However, note that since the commencement of the current Administrative Arrangements Order on 3 April 2012, the legal status of QPWS as the public land authority for these lands is unclear as the Order does not provide a Minister or Department with responsibility for custodial (land) management of State forests and timber reserves.
- QPWS issue permits and authorities under the relevant Act to manage and condition CSG activities. For example, on State forests, *Forestry Act 1959* "permits to traverse" are used to apply conditions to companies when accessing forests for low impact survey activities that do not involve clearing of vegetation, while "occupation permits" are used to manage the installation of CSG infrastructure.
- The *Forestry Act 1959* also requires that the State is compensated for any loss of commercial timber, and royalties are paid for the use of State owned quarry material.

Key management issues

- Authorities for petroleum exploration (authorities to prospect) and production (petroleum leases) cover the majority of southern and central Queensland and have the potential to impact on a large number of State forests and timber reserves (Attachment C).
- The rapid growth of the CSG industry and scheduled timeframes for project completion has resulted in significantly increased industry expectations and resourcing demand. QPWS staff carry out a wide range of functions including inspection, assessment, permit administration, coordination and

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compliance activities, along with the development of policy and legislation, strategic engagement, and industry liaison.

- Ten (10) QPWS positions located in Roma, Toowoomba, Rockhampton and Brisbane that service the CSG industry sch3(2) Cabinet matter - brought into existence on or after commencement and are the subject a separate briefing note (CTS 04017/12).
- A number of land management issues are associated with CSG industry activities on QPWS managed lands. These include
 - the cumulative impacts of clearing, land disturbance and fragmentation;
 - loss of State owned commercial timber on State forests and timber reserves;
 - demand for State owned quarry materials on State forests and timber reserves;
 - impacts on land management activities including fire and pest management programs;
 - impacts on existing users and authority holders (for example, grazing lessees, apiarists, electricity and telecommunications providers); and
 - the loss of opportunities for alternative land uses (including opportunities for tourism and recreation) for the duration of CSG activities.
- The current extent of clearing and disturbance caused by CSG activities on State forests is illustrated by an aerial photo of Hallett State Forest ([Attachment D](#)).
- Several CSG companies are now seeking approval to clear additional areas for the purposes of accommodating infrastructure necessary when undertaking hydraulic fracturing of coal seams s.73 Irrelevant information or to construct overhead powerlines to well sites which have previously been gas powered s.73 Irrelevant information

Revenue:

- Occupation fees for CSG activities are currently set at \$982 per hectare or part thereof. To date for the 2011/12 financial year, revenue of over \$770,000 has been received or invoiced.
- QPWS currently applies an interim compensation requirement of five times the value of land disturbed by the activity (based on an independent land valuation) to all development related activities carried out on QPWS managed lands, to compensate for the loss of environmental, social and economic values.
- A State-wide compensation methodology for CSG activities is currently being developed.

Red Tape Reduction:

- QPWS are working with companies and relevant Government agencies on a more strategic approach to identifying and managing the full range of impacts of CSG activities on public land, and also to resolve a number of areas of uncertainty in resource legislation.
- These include making provision for easements to be granted over areas of State forests and timber reserves for transmission pipelines. Amendments to both the *Land Act 1994* and the P&G Act were included in the Resources Legislation (Balance, Certainty and Efficiency) Amendment Bill which was before parliament before the recent change of government. Complementary amendments are required to the *Forestry Act 1959*.
- Occupation permits issued under s35(1)a of the *Forestry Act 1959* are currently limited to maximum periods of seven years and may be issued for an area of no more than 10 hectares.
- Further amendments to the Forestry Act are proposed to streamline the administration of occupation permits issued for CSG related infrastructure. These will allow occupation permits to be issued for longer than seven years and for areas of more than 10 hectares, when issued to petroleum lease holders.

DIRECTOR-GENERAL'S COMMENTS

ATTACHMENTS

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- Attachment A: Summary of LNG Projects of State significance
- Attachment B: s.73 Irrelevant information
- Attachment C: Current extent of Authorities to Prospect and Petroleum Leases across Queensland
- Attachment D: Aerial photo of Hallett State forest.

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Attachment A: Summary of LNG Projects of State significance

Project	Proponent	Major project components	Timeframes
Australia Pacific Liquefied Natural Gas project	APLNG (a 50:50 joint venture between Origin Energy and ConocoPhillips)	<ul style="list-style-type: none"> Development of coal seam gas resources; 450 km underground main transmission gas pipeline Processing plant and export facility (four trains with a total capacity of up to 18 million tonnes per annum of LNG) 	Plant completion - 2014
Gladstone Liquefied Natural Gas Project	GLNG (Santos Ltd and PETRONAS)	<ul style="list-style-type: none"> Extraction of coal seam gas from fields around Roma, Emerald, Injune and Taroom; 435 km gas transmission pipeline from the gas fields to Gladstone; LNG facility of approximately 10 million tonnes per annum on Curtis Island and associated infrastructure including marine facilities, port dredging and a potential access road and bridge at Gladstone. 	Plant completion - 2014
Queensland Curtis Liquefied Natural Gas Project	Queensland Gas Company Ltd (a wholly owned subsidiary of the BG group)	<ul style="list-style-type: none"> Expansion of QGC's coal seam gas operations in the Surat Basin; 800-kilometre network of gas pipelines in gas fields and from fields to Gladstone; LNG plant and export facility (up to three trains with a total capacity of up to 12 million tonnes per annum of LNG). 	Plant completion - 2014
Arrow Liquefied Natural Gas Plant Project	Arrow Energy	<ul style="list-style-type: none"> LNG processing plant and export facility —staged construction of up to four trains producing up to 18 million tonnes per annum of LNG. 9km (approx) feed gas pipeline with marine logistics facilities on Curtis Island and the mainland Dredging of the seabed in Port Curtis and the riverbed at the mouth of the Calliope River to provide access to the marine logistics facilities. <p>(Associated with Arrow Energy's separate Surat Gas; Bowen Gas; Surat Gas Pipeline and Bowen Gas Pipeline projects)</p>	Plant completion - 2017

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(hard copy A3 map provided)

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Petroleum Leases and Exploration Permits

Legend

Towns

Petroleum Leases

Exploration Permits Petroleum

QPWS Estate

Towns

Application

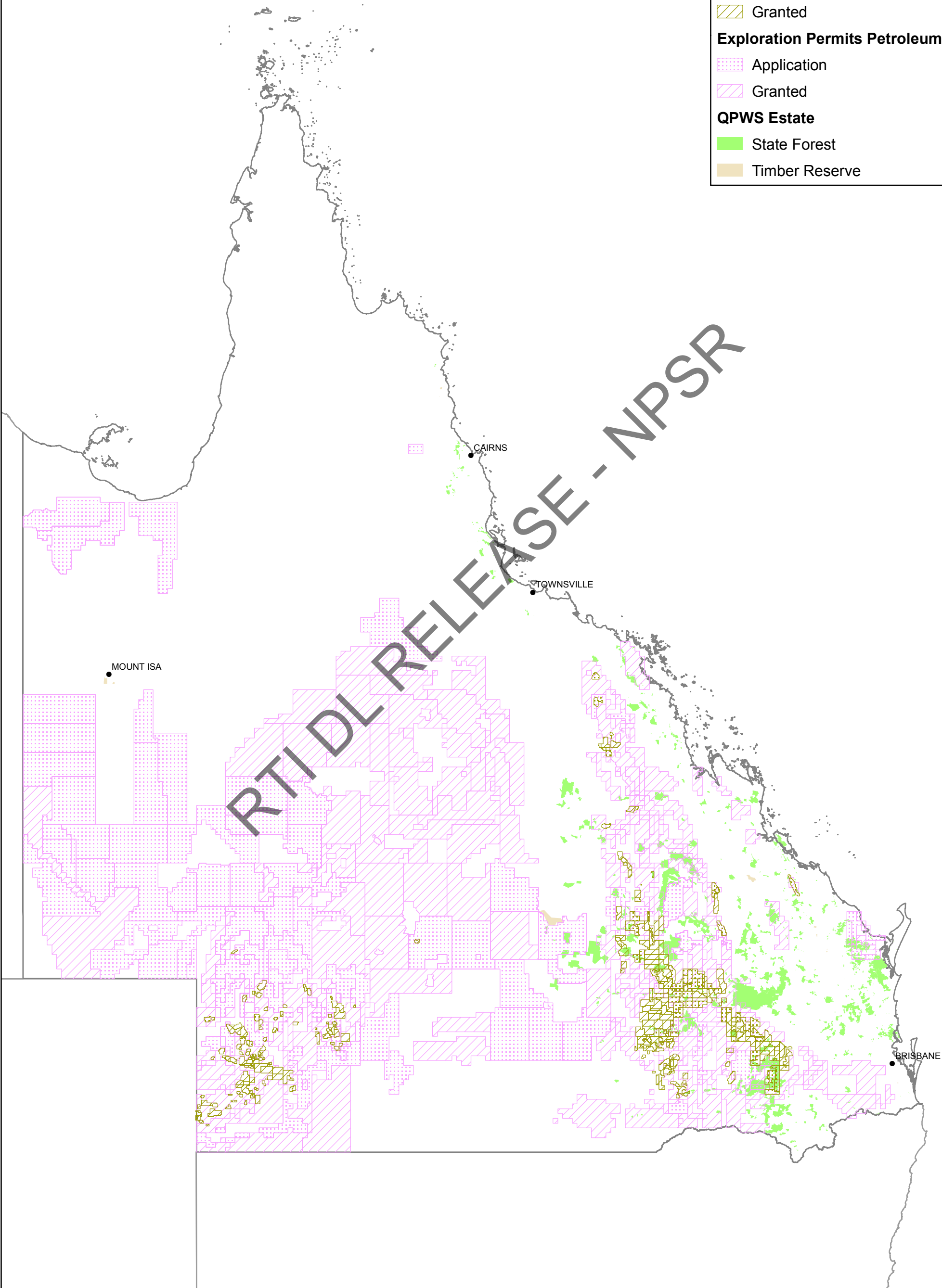
Granted

Application

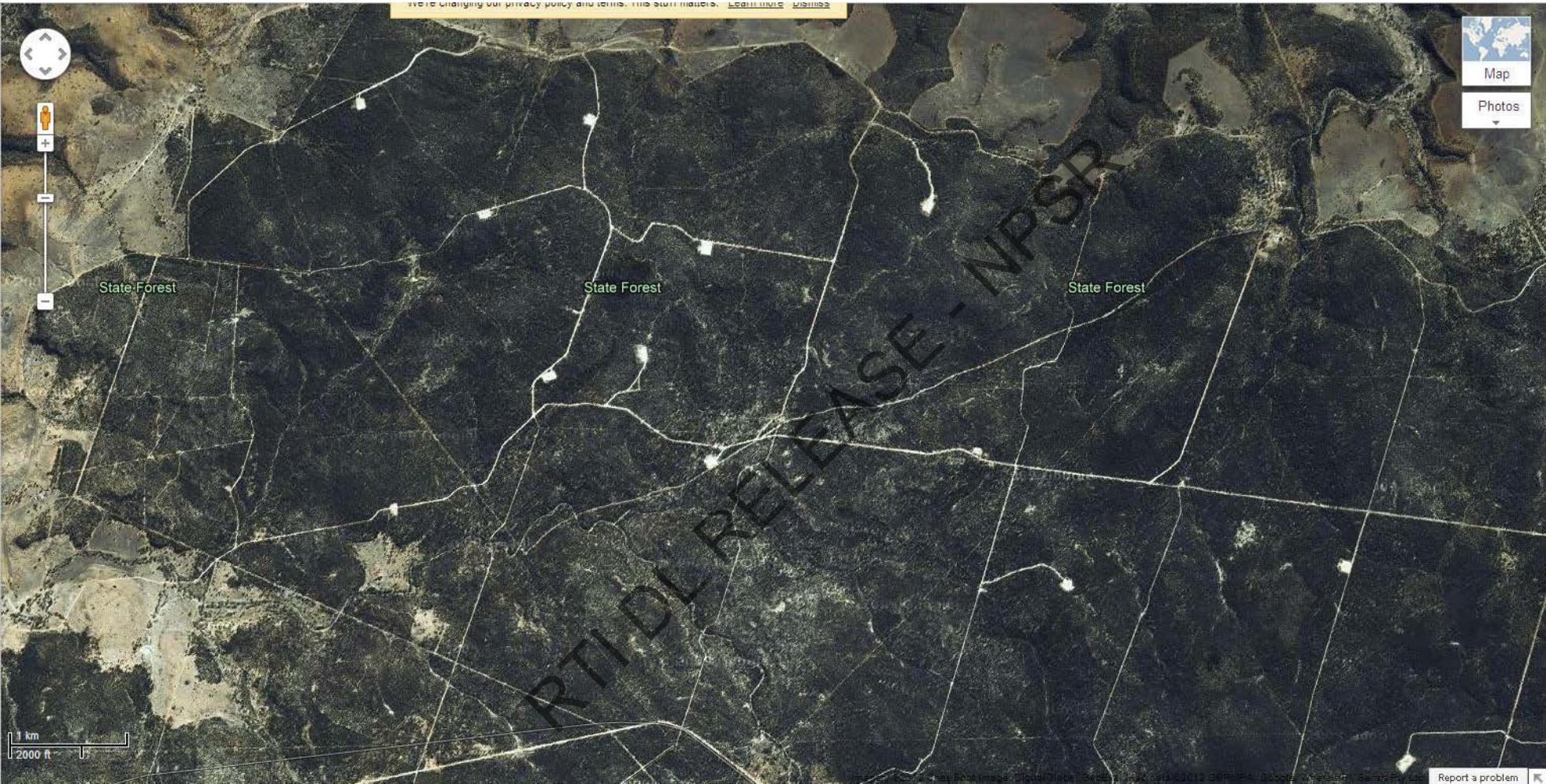
Granted

State Forest

Timber Reserve



Attachment D: Hallett State forest



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