REPORT

Supporting Information Report - Talinga Pond D - Regional Interests Development Application

Q-4100-15-EA-030_02

Australia Pacific LNG Upstream Project

Supporting information report to authorise the construction of Talinga Pond D and associated infrastructure within Lot 1 RG491 and Lot 32 RG247 within Strategic Cropping Area and Priority Agricultural Area

Revision	Date	Description	Originator	Checked	QA/Eng	Approved
0	12/04/2016	Issued for Use	L Appleby	S Dale	S Dale	T Hatfield

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- **Will**, **shall** or **must** indicate a mandatory course of action
- **Should** indicates a recommended course of action
- **May** or **can** indicate a possible course of action.

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1. Introduction

1.1. Overview

Origin Energy Resources Limited, as the upstream operator of Australia Pacific LNG Pty Limited (Australia Pacific LNG), has prepared this supporting information report to accompany an application under Section 28 of the *Regional Planning Interests Act 2014* (RPI Act) to the Department of Infrastructure, Local Government and Planning (DILGP).

This application relates to the construction and operation of petroleum activities located within a Strategic Cropping Area (SCA) and Priority Agricultural Area (PAA) where an exemption under the RPI Act does not apply. The infrastructure is proposed to be constructed and operated under Petroleum Lease (PL) 226 and the Walloons Environmental Authority (EA) EPPG00968013.

Australia Pacific LNG intends to undertake the activities within an area of regional interest (ARI) and is an eligible entity for making an assessment application under the RPI Act as the holder of the EA.

This application includes:

- Cover letter (Q-4100-15-EA-030)
- Completed DILGP application form (Version 2.0) (Q-4100-15-EA-030_01)
- Supporting Information Report (Q-4100-15-EA-030_02) (this document).

The values sought to be protected by the RPI Act are still achieved whilst allowing Australia Pacific LNG undertake the activities. Appendix A provides an overview of the proposed location of the infrastructure subject to this assessment application.

1.2. Document References, Abbreviations and Definitions

In support of this application, associated documents are presented in Table 1, and appended where relevant.

Table 1: Associated Document References

Document Number	Title	Attachment
External	Forage Crop Frequency Report Lot 1RG491	Appendix B
External	Forage Crop Frequency Report Lot 32RG247	Appendix B
External	Land Use Map Lot 1RG491	Appendix B
External	Land Use Map Lot 32RG247	Appendix B
GISWR_30635	Mapping	Appendix A
Q-4100-15-EA-030	Cover Letter	
Q-4100-15-EA-030_01	Application Form	
Q-4100-15-RP-038	Ecology Assessment Report	Appendix C
Q-LNG01-15-MP-0107	Australia Pacific LNG Remediation, Rehabilitation, Recovery and Monitoring Plan	Appendix C
Q-LNG01-15-MP-1005	Australia Pacific LNG Construction Environmental Management Plan	Appendix C

Table 2: Abbreviations

Abbreviation	Description
ALUM	Australian Land Use and Management
ARI	Area of Regional Interest
CSG	Coal Seam Gas
DILGP	Department of Infrastructure, Local Government and Planning
EA	Environmental Authority

Abbreviation	Description
EHP	Department of Environment and Heritage Protection
EP Act	*Environmental Protection Act 1994*
EPA	Essential Petroleum Activity
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
ERE	Endangered Regional Ecosystem
ESA	Environmentally Sensitive Area
FA	Financial assurance
Ha	Hectare
PAA	Priority Agricultural Area
PL	Petroleum Lease
PPZ	Primary Protection Zone
RIDA	Regional Interests Development Approval
ROW	Right of Way
RPI Act	*Regional Planning Interests Act 2014*
SCA	Strategic Cropping Area
SCL	Strategic Cropping Land

Table 3: Definitions

Term	Definition
Permanent impact	A resource activity or regulated activity has a permanent impact on strategic cropping land if, because of carrying out the activity, the land cannot be restored to its pre-activity condition.
Pre-activity condition	For land in the strategic cropping area, means the condition of the land's soil as identified and analysed within 1 year before the making of an assessment application for a resource activity or regulated activity to be carried out on the land.
Property (SCL)	In the strategic cropping area, means— (a) a single lot; or (b) otherwise—all the lots that are owned by the same person or have 1 or more common owners and— (i) are managed as a single agricultural enterprise; or (ii) form a single discrete area because 1 lot is adjacent, in whole or part, to another lot in that single discrete area (other than for any road or watercourse between any of the lots).

1.3. Revision History

Table 4: Revision History

Date	Revision Number	Description of changes

2. Description of Resource Activities

2.1. Background

Talinga Pond A was a CSG water storage pond that was constructed in 2004 and decommissioned in 2013 in accordance with the requirements of the Walloons Environmental Authority (EA) (EPPG00968013) issued under the *Environmental Protection Act 1994*. Talinga Pond A footprint is approximately 35 ha.

As coal seam gas (CSG) production activities still occur within the Walloons Development Area, brine storage facilities are an ongoing requirement of CSG development. It is proposed that a new brine pond (Talinga Pond D) be constructed within the southern extent of the existing disturbance footprint of Talinga Pond A to manage ongoing brine storage requirements. As part of the rehabilitation activities associated with Talinga Pond A, remediation of saline impacted soil is proposed to be undertaken in the northern portion of the Talinga Pond A footprint. To manage water levels within Talinga Pond D and the other existing ponds in the region (Pond B), an inter pond transfer pipeline system (IPT) is proposed between Talinga Pond D and Pond B (refer to Figure 1).

Portions of the above infrastructure will be located inside the buffer of environmentally sensitive areas (as defined under the Walloons EA) for which an amendment is required to the Walloons EA to authorise their location. Additionally, these environmentally sensitive area buffers are also identified as strategic cropping areas (SCA) and priority agricultural areas (PAA) under the *Regional Planning Interests Act 2014* (RPI Act).

Accordingly, the infrastructure locations subject to the EA amendment do not meet the exemptions requirements within the RPI Act and a Regional interest Development Approval is required.

Refer to Figure 2, Figure 1 and Appendix A for the location of the above infrastructure relative to the environmentally sensitive area buffers, SCA and PAA.

Figure 1: Overview of Infrastructure and Surrounding Pond

2.2. Resource Activities

To construct and operate the above resource activities the following activities will be conducted:

- Site preparation, including haul road corridors and stockpile areas for construction
- Construct temporary haul roads and access tracks
- Install erosion and sediment control, as determined by a suitably qualified person and in accordance with the site specific erosion and sediment control plan (to be developed)
- Repair and re-use existing irrigation water pipeline and installation of temporary storage facilities for construction water
- Install water storage tank, irrigation and pumping system from the soil remediation area into Pond D
- Move Talinga Pond A saline soil to the soil remediation area
- Remediate saline material within the soil remediation area using passive leaching with discharge of effluent water from the passive leaching into the newly constructed Talinga Pond D
- Construct Talinga Pond D
- Remove existing perimeter fencing and re-installation around the exterior of Talinga Pond D and the soil remediation area
- Dig 2.5 km long and 0.9 m wide trench for the IPT
- Install 315 mm diameter high density polyethylene pipe in the trench and backfill
- Rehabilitate IPT route
- Rehabilitate soil remediation area
- Remediate / rehabilitate Talinga Pond D

3. Location Details

Table 5 summarises key required information relevant to this RIDA application.

Table 5: Summary of Property Specific Information

Aspect	Description
Lot Plans	Lots 1RG491 and 32RG247
Property Name	Rockwood
Land Owner	Australia Pacific LNG Pty Ltd
Land Purchased	2004
Regional Council	Western Downs Regional Council
Regional Plan	Darling Downs
Bioregion / Subregion	Brigalow Belt bioregion, Inglewood Sandstones and Eastern Darling Downs subregion
Area of Regional Interest	Priority Agricultural Area (PAA) and Strategic Cropping Area (SCA)

ArcGIS Shapefiles to a projected coordinate system of GDA94 accompanies this application and identifies the location of the activity.

3.1. Pre-Activity Land Condition

Lots 1RG491 and 32RG247, known as 'Rockwood', are located at 4585 Kogan-Condamine Road, Nangram, Qld 4413 and occupy a combined area of land of 1,538 ha.

3.1.1. Current Land Use

Lots 1RG491 and 32RG247 (the Site) are located within the Darling Downs PAA, within a SCA and are mapped partially as SCL.

The current land use of the Site is CSG infrastructure including gathering networks, gas wells and two large brine ponds.

A cattle contract is current across the Rockwood properties in which up to 288 steers are run on the Lots subject to this application. The cattle are present on the property for approximately 9 months of the year. This current contract of cattle grazing is planned into the future. Due to the nature of the proposed development predominately within previously disturbed development areas, the proposed activity is not likely to impact cattle grazing plans.

No cropping is current, or proposed on the properties. Further land use information is described in the sections below.

3.1.2. Soil Characteristics

The Site is located within both the Inglewood Sandstones and Eastern Darling Downs subregions within the Brigalow Belt bioregion. Inglewood Sandstones is characterised by undulating to low hilly country on deeply weathered and laterised Jurassic-Cretaceous sandstone. Eastern Darling Downs comprises of substrates of alluvial soils within the Condamine River plain.

Based on the Australia Soil Classification System, the property consists of the soil order sodosol. The soil order generally has a low agricultural potential due to poor structure and permeability. On Site assessment has described the soil to be predominately of shallow sandy loam soils.

Extensive soil sampling for geotechnical purposes has occurred within and surrounding the existing disturbance footprint of Talinga Pond A, both prior to construction commencing and during planning for remediation activities. The results of these investigations have confirmed that the dominant soils at Talinga A dam are sodosols (sodic and alkaline soils).

Native soils in the vicinity of the Talinga A dam demonstrate a soil profile top layer dominated by grey brown silty clay and/or silty sand with some gravel (AECOM 2014). Samples taken from 24 bore holes within and surrounding the Talinga Pond A footprint prior to construction commencing were assessed for dispersiveness using Emerson Class Number test methods described in AS1289.3.8.1, (Butler Partners 2003). This sampling found that native soils are predominantly Emerson Class Number 2 (moderately to highly susceptible to erosion) with some areas classified as Emerson Class Number 1 (highly susceptible to erosion).

These soil characteristics strongly indicate that the land subject to this application is not suitable for cropping, and is certainly not land that is highly suitable or likely to be highly suitable for cropping, which is the definition of SCL under the RPI Act. . However, there is currently insufficient sampling data to assess the chemical (soil pH, salinity) and structural (soil water storage) characteristics of this soil against the SCL criteria listed in schedule 3, part 2 of the RPI Regulation. As such, for the purposes of this application this soil has been assessed as SCL.

3.2. Surrounding Land Uses

The existing land use on surrounding land within a 1 km radius of the boundaries of the disturbance area subject to the application have been described in Table 6 and are shown on Appendix A.

Table 6: Surrounding Land Use

Lot Plan	Landholder	Location in Relation to Proposed Disturbance	Description of Existing Land Use on Surrounding Land
3RG27	Australia Pacific LNG Pty Limited	East of Lots 1RG491 and 32RG247	Lot 3RG27 has the same land use as Lots 1RG491 and 32RG247.

4. Priority Agricultural Area

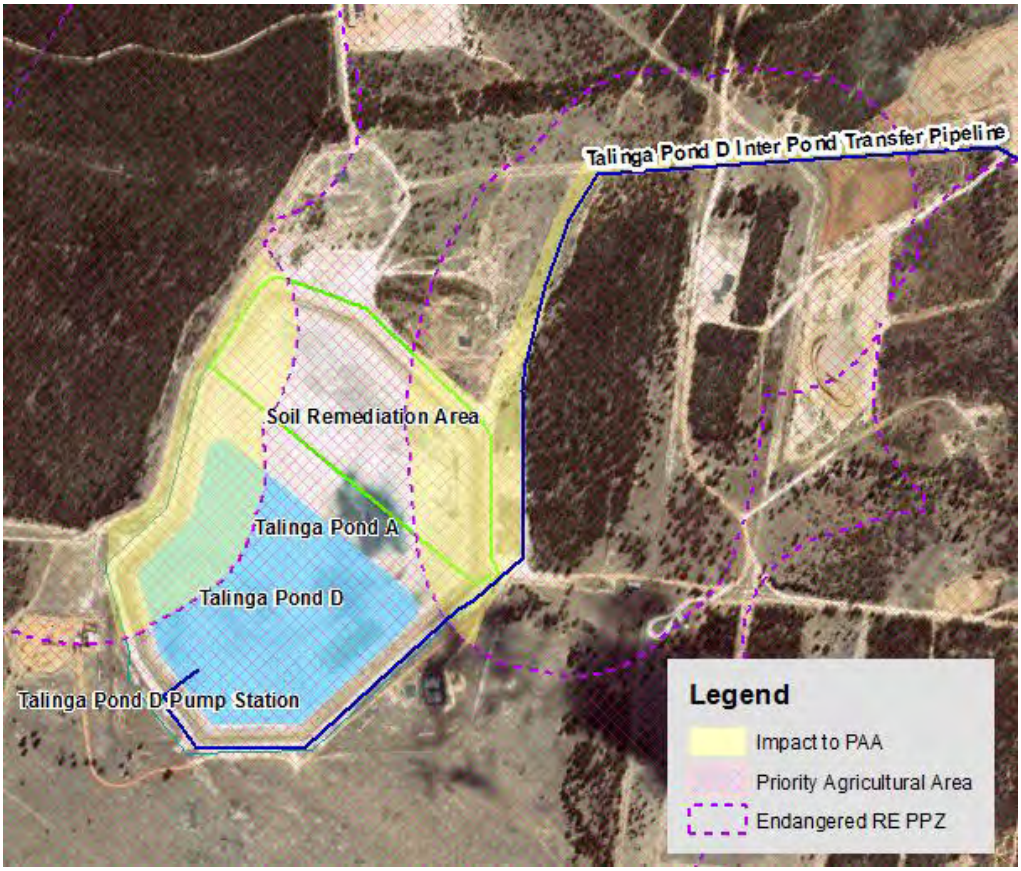
4.1. Maximum Potential Impact

Lots 1RG491 and 32RG247 are located entirely within a PAA for which a maximum of 19.2 ha is proposed to be disturbed for construction of Talinga Pond D, the soil remediation area and the IPT within the environmentally sensitive area buffers. The 19.2 ha consists of the following breakdown:

- Talinga Pond D – 7.6 ha
- Soil remediation area – 9.5 ha
- IPT – 2.1 ha (1.4 km x 15 m)

Refer to Figure 2 showing the location of these areas.

Figure 2: Maximum Potential Impact to PAA



4.2. Assessment of Priority Agricultural Land Use

The RPI Act Guideline 07/14 *How to identify a priority agricultural land use (PALU)* was consulted to determine if Lots 1RG491 and 32RG247 occurring within the Darling Downs PAA are utilised as a PALU.

4.2.1. Australian Land Use Management

The land is located within the Western Down Regional Council in which is incorporated in the Darling Downs regional plan. The PALUs specific to the PAAs mapped in the Darling Downs regional plan are defined as land uses and practices associated with the land uses in class 3.3 (cropping), 3.4 (perennial horticulture), 3.5 (seasonal horticulture), 4 (production from irrigated agriculture and plantations) and 5.1 (intensive uses) in accordance with the Australian Land Use and Management (ALUM) classification (Version 7).

A search at the secondary level of the ALUM classification for Lots 1RG491 and 32RG247 was conducted which identified the current land use to be for:

- Utilities; and
- Dams

The mapping (see attached, Appendix B) is considered consistent with the current land use of the property, which is for CSG (utilities) and dams (Talinga Pond A and B).

4.2.2. Frequency of Agricultural Activity

Schedule 2 of the RPI Regulation states that land or a property used for a PALU means the land or property has been used for a PALU for at least three years during the ten years immediately before an assessment application in relation to the land is made.

To determine the frequency of agricultural activity, Forage Crop Frequency reports were obtained for Lots 1RG491 and 32RG247 (see attached, Appendix B). The results of the reports conclude the following:

- For Lot 1RG491, 2 or fewer crops were recorded during 2005-2015; and
- For Lot 32RG247, 2 or fewer crops were recorded during 2005-2015

The reports provide evidence that during the last 10 consecutive years, the Lots are not used for or are a PALU.

4.2.3. Landholder Based Information

Further investigation was obtained to improve the mapping data. This included identifying a summary of existing activities which have occurred on the property. The property was purchased by the landholder in 2004. Since this time, the land has not been used for agricultural purposes, but instead for the placement of a water storage pond and associated CSG infrastructure.

4.2.4. Conclusions of Land Use

The proposed activity will not impact on a PALU as the land is not considered to be a PALU

5. Strategic Cropping Area

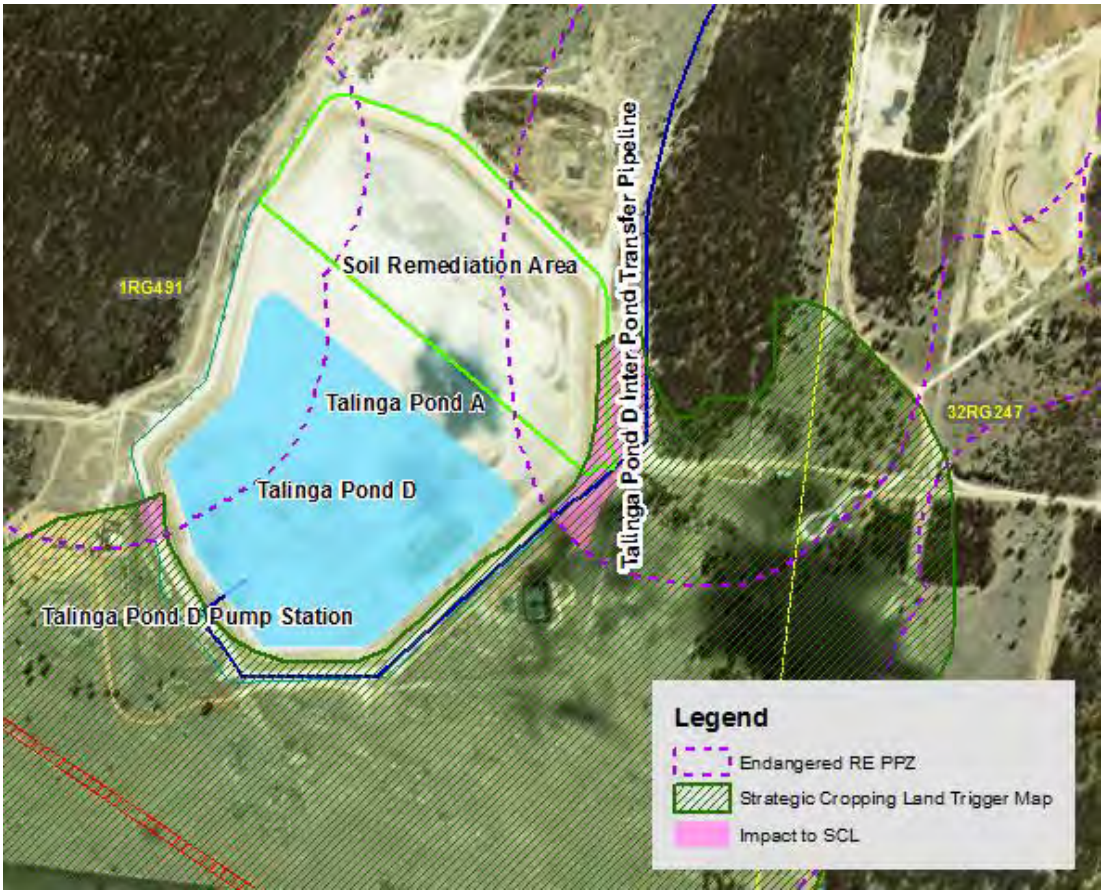
5.1. Maximum Potential Impact

Lots 1RG491 and 32RG247 are located partially within a SCA for which a maximum of 2.2 ha is proposed to be disturbed for construction of the IPT and south-west section of Talinga Pond D within the environmentally sensitive area buffers. The 2.2 ha consists of the following breakdown:

- Talinga Pond D – 0.2 ha
- Soil remediation area – 1.50 ha
- IPT – 0.50 ha (340m x 15m)

Refer Figure 3 to showing the location of these areas.

Figure 3: Maximum Potential Impact to SCL



There will be no significant impact to the land as the land can be restored to its pre-activity condition as soon as possible following completion of the activity. The SCA Assessment Criteria response to required outcomes is described in Section 12.

6. Extent and Duration of Impact on SCA and PAA

Construction of the pond and IPT is planned to be completed within 8 months. The pond will be used for approximately 20 years, prior to being decommissioned and rehabilitated. The IPT ROW requires no operations ROW so backfilling of the trench and reinstatement of topsoils will occurring within three (3) months after installation of the pipeline.

The soil remediation area is proposed to be utilised for approximately 3 years, however, the timeframe of use is dependent on outcomes based for condition of soil.

Refer to Section 7 for details on construction, reinstatement, decommissioning and rehabilitation of the proposed disturbance.

7. Management of Mitigation Measures on the SCA and PAA

7.1. Assessment of Alternatives

Due to the proposed infrastructure of Talinga Pond D and the soil remediation area being entirely within the existing disturbance area of Talinga Pond A, no alternative locations were considered as no other alternative would reduce potential impact further than the proposed location.

For the location of the IPT, the pipeline follows an existing gathering water line ROW. No operational ROW is required for the IPT.

To the greatest extent, all ancillary activities will be undertaken within the existing disturbance footprint of Talinga Pond A of the existing ROW of a gathering water line.

7.2. Construction Activities

Australia Pacific LNG will clear, construct and operate within a maximum disturbance area of 19.2 ha (19.2 ha of PAA and 2.2 ha of SCA) (refer to Figure 2 and Figure 3, respectively). This area represents the maximum potential impact to the ARI during construction.

As identified in Figure 2 and Figure 3, the majority of impact occurring during construction is limited to the existing footprint of Talinga Pond A.

Construction is planned to be completed within 8 months. The Talinga Pond D dam will be designed, constructed, operated, modified (if required) and decommissioned in accordance with the requirements of the most recent *Manual for Assessing Consequence Categories and Hydraulic Performance Structures*. All proposed activities will be constructed in accordance with the Walloons EA and will adhere to the Soils Management Plan for Walloons Development Area, as required by the Walloons EA.

Australia Pacific LNG will minimise impacts to ARIs by ensuring that all construction activities are conducted in accordance with the Australia Pacific LNG Construction Environmental Management Plan (CEMP) (Q-LNG01-15-MP-1005). The CEMP provides details on how all construction activities are to occur and how environmental harm will be mitigated. Specifically relevant to this application, mitigation measures will include:

- Stockpiling of grasses, woody vegetation
- Topsoil and subsoils will be stored separately and will be stored in order to keep soil integrity
- Measures will be implemented and maintained to minimise stormwater entry onto significantly disturbed land

Detailed erosion and sediment control (ESC) measures will be maintained and regularly inspected, particularly prior to, and immediately following, any forecast wet weather. Generally, works will be temporarily ceased during wet weather to minimise impacts to the land and soil runoff.

Where cattle are present on the property, temporary fencing will be constructed to ensure that the topsoil stockpiles are not disturbed.

7.3. Reinstatement

Progressive reinstatement will occur and be completed in accordance with the Australia Pacific LNG Rehabilitation, Remediation, Recovery and Monitoring Report (Q-LNG01-15-MP-0107).

All reinstatement will be carried out in accordance with the following Australia Pacific LNG documents (Appendix C):

- Rehabilitation, Remediation, Recovery and Monitoring Plan (Q-LNG01-15-MP-0107)
- Construction Environmental Management Plan (Q-LNG01-15-MP-1005)
- The Walloons EA
- The RIDA, once granted

All subsoil and topsoil will be replaced during reinstatement, where viable. Having been stored separately, topsoil will largely retain its viable seed bank and soil chemistry. From experience elsewhere on the Australia Pacific LNG project, this is determined to be adequate to ensure regrowth of grasses. All soil redeemed from the soil remediation area will be used, where proven to a standard that it will not cause human or environmental harm. Specifications for soil layer thickness will be developed to ensure root zone salinity will support vegetation growth.

The landform will be reinstated to its original contours following completion of backfilling. Reinstatement will be to a standard that realises stable landforms and where no subsidence or erosion exists during the operational life of the proposed activity.

Post decommissioning of the proposed activity, the area will be fully returned to pre-activity condition.

7.4. Operation Activities

Ongoing operations to support the project and associated infrastructure will include the following:

- Rehabilitation monitoring of areas that are not required during operation

- Dam maintenance
- Slashing and weed management

All affected land will be returned to its pre-project landform and land use in accordance with conditions of the Walloons EA. The IPT will not require an operation ROW and will commence rehabilitation, in accordance with the Walloons EA conditions prior to installation.

Australia Pacific LNG will maintain a photographic record, as required under the Rehabilitation, Remediation, Recovery and Monitoring Plan (Q-LNG01-15-MP-0107).

7.5. Decommissioning

All significantly disturbance land caused by the carrying out of petroleum activities will be rehabilitated in accordance with the final acceptance criteria of the Walloons EA and the Walloons Rehabilitation Plan. Rehabilitated areas will be monitored in accordance with the Walloons Rehabilitation Monitoring Program and the conditions of the Walloons EA.

Decommissioning of the pond will occur within 20 years, post construction.

The soil remediation area is likely to be utilised for a period of three (3) years, however, is dependent on the success of the soil remediation. Soil will be remediated to a condition which will support onsite retention. Excess clean spoil from pond construction activities will be placed over the remediated soil then clean embankment material will be placed on top. Finally, topsoil, or ameliorated soil, will be placed as the top layer to support revegetation to meet rehabilitation conditions. Specifications for layer thickness will be developed to ensure root zone salinity will support vegetation growth.

8. Financial Assurance

Australia Pacific LNG will hold sufficient (FA) for the proposed activities under the Walloons EA. The FA will be held by the Department of Environment and Heritage Protection (EHP) prior to significant land disturbance. This FA will provide for the rehabilitation of the land back to its original landform, therefore, Australia Pacific LNG does not propose to provide any further FA for this application.

9. Public Notification

Australia Pacific LNG is the landholder of the property under which this application is being sought. Due to the nature of the project proposed being similar to the existing activities in the area and within the property, along with the applicant being the landholder, no further public notification is being proposed.

The surrounding landholders outside Australia Pacific LNG properties are frequently consulted by Australia Pacific LNG due to existing construction and operations of CSG activity in the area. Due to the volume of petroleum activities in the area, it is not considered that any new impacts will occur and that any additional value would be gained from public notification of this RIDA.

In addition, the proposed construction is within the Australia Pacific LNG Environmental Impact Statement (EIS) study area. Evidence of public notification of the Australia Pacific LNG EIS can be found here: http://www.statedevelopment.qld.gov.au/assessments-and-approvals/australia-pacific-lng-project.html. Due to previous public notification, Australia Pacific LNG requests to by exempt from the requirement to publicly notify this application.

10. Assessment Application Fees

The definition of an expected area of impact for an assessment application means the area in which:

- The activity is proposed to be carried out; and
- Carrying out the activity is likely to have an impact

The expected area of impact relating to this application is less than 30 ha and therefore, in accordance with the RPI Act Guideline (01/14), the application fee accompanying this application is $5,844.00. The application fee will be provided by direct payment.

11. Approvals and Legislative Content

11.1. Approvals and Decisions in Place

The proposed activity will be constructed and operated in accordance with all Australia Pacific LNG existing approvals, including:

- *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* approval 2009/4974
- The Coordinator General's Report for the Australia Pacific LNG Project
- The internal disturbance approval process
- Walloons EA
- RIDA, once approved

11.2. Guidelines, Standards and Codes of Practice

The following Department of State Development, Infrastructure and Planning (DSDIP) guidelines have been consulted during the preparation of this RIDA:

- Guideline 01/14: How to make an assessment application for regional interest development application under the RPI Act
- Guideline 02/14: Carrying out activities in a priority agricultural area
- Guideline 03/14: Carrying out activities in strategic cropping area
- Guideline 06/14: Public notification of assessment applications
- Guideline 07/14: How to identify a priority agricultural land use (PALU)
- Guideline 09/14: How to determine if an activity has a permanent impact on strategic cropping land

The following additional government documents have been consulted during the preparation of this RIDA:

- The Queensland Auditor Handbook for Contaminated Land Module 5: Contaminated land investigation documents, auditor certification and compliance assessments (EHP, 2015)
- The *Coal Seam Gas Water Management Policy* (issued by EHP) and the regulatory acts referenced therein

12. Required Outcome Assessment

12.1. Priority Agricultural Area

The PAA Assessment Criteria provide two required outcomes for activities in PAAs; one that deals with impacts on a property level, and a second that deals with impacts on a regional level.

Schedule 2, Part 2 of the *Regional Planning Interests Regulation 2014* sets out the required outcome and prescribed solutions for activities carried out in a PAA. Refer to Table 7 and Table 8 for the evidence associated with each prescribed solution.

Table 7: PAA Assessment Criteria - Required Outcome 1

Required Outcome 1 – Managing impacts on use of property for priority agricultural land use in priority agricultural area The activity will be carried out on a property in a priority agricultural area and will not result in a material impact on the use of the property for a priority agricultural land use	
Prescribed Solution	**Evidence / Response**
PS1: The application demonstrates all of the following—	
The application demonstrates the activity will not be	The activity is proposed within a priority agricultural

located on land that is used for a priority agricultural land use.	area, however, the land is not a PALU, as demonstrated within Section 4.2
(a) if the applicant is not the owner of the land and has not entered into a voluntary agreement with the owner— (i) the applicant has taken all reasonable steps to consult and negotiate with the owner about the expected impact of carrying out the activity on each priority agricultural land use for which the land is used; and (ii) carrying out the activity on the property will not result in a loss of more than 2% of both— (A) the land on the property used for a priority agricultural land use; and (B) the productive capacity of any priority agricultural land use on the property;	N/A – the applicant is the landholder and the land is not used as a PALU
(b) the activity cannot be carried out on other land that is not used for a priority agricultural land use, including, for example, land elsewhere on the property, on an adjacent property or at another nearby location;	N/A - the land is not used as a PALU
(c) the construction and operation footprint of the activity on the part of the property used for a priority agricultural land use is minimised to the greatest extent possible;	N/A - the land is not used as a PALU
(d) the activity will not constrain, restrict or prevent the ongoing conduct on the property of a priority agricultural land use, including, for example, everyday farm practices and an activity or infrastructure essential to the operation of a priority agricultural land use on the property;	N/A - the land is not used as a PALU
(e) the activity is not likely to have a significant impact on the priority agricultural area;	The land is not used as a PALU. For over 10 years, the land has been used for other purposes then a PALU, however, is within a PAA. It is unlikely that the proposed activity will have a significant impact on PAA due to the existing land uses on the property already occurring within the PAA and due to the proposed activity being largely contained within existing disturbance footprints.
(f) the activity is not likely to have an impact on land owned by a person other than the applicant or the land owner mentioned in paragraph (a).	The surrounding land is also owned by the applicant. The surrounding land will not be impacted other land, due to the mitigation and management measures planned, and due to the disturbance area being largely restrained to previously significantly disturbed areas.

Table 8: PAA Assessment Criteria - Required Outcome 2

Required Outcome 2 - Managing aspects on a region in relation to use of an area in the region for a priority agricultural land use The activity is to be carried out on two or more properties in an agricultural area in a region and the activity will not result in a material impact on the region because of the activity's impact on the use of land in the priority area for one or more priority agricultural land uses

Prescribed Solution	Evidence / Response
PS2: (1) The application demonstrates all of the following—	
(a) if the activity is to be carried out in a priority agricultural area identified in a regional plan—the activity will contribute to the regional outcomes, and be consistent with the regional policies, stated in the regional plan;	The activity will be carried out in the north-western portion of the Darling Downs PAA. The Darling Downs regional plan regional policies strive to protect PALU while supporting co-existence opportunities for the resources sectors. The proposed activity supports this policy as it does not impact on PALU and is consistent with the pre-existing resource activities on the land.
(b) the activity cannot be carried out on other land in the region that is not used for a priority agricultural land use, including, for example, land elsewhere on a property, on an adjacent property or at another nearby location;	N/A – the land is not a PALU
(c) the construction and operation footprint of the activity on the area in the region used for a priority agricultural land use is minimised to the greatest extent possible;	N/A – the land is not a PALU
(d) the activity will not result in widespread or irreversible impacts on the future use of an area in the region for 1 or more priority agricultural land uses;	N/A – the land is not a PALU
(e) the activity will not constrain, restrict or prevent the ongoing use of an area in the region for 1 or more priority agricultural land uses, including, for example, infrastructure essential to the operation of a priority agricultural land use.	N/A – the land is not a PALU
(2) Subsection (3) applies if the activity is to be carried out in a priority agricultural area that includes a regionally significant water source and— (a) if the activity is to be carried out under an authority to prospect or a petroleum lease under the Petroleum and Gas (Production and Safety) Act 2004—the activity is likely to produce CSG water; or (b) if the activity is to be carried out under a mineral development licence or a mining lease under the Mineral Resources Act 1989—	N/A - the activity is not to be carried out in a PAA that includes a regionally significant water source, therefore, subsection (3) is not applicable.

12.2. Strategic Cropping Land

Schedule 2, Part 4 of the *Regional Planning Interests Regulation 2014* sets out the required outcome and prescribed solutions for activities carried out in an SCA. Refer to Table 9, Table 10 and Table 11 for the evidence associated with each prescribed solution.

Table 9: SCA Assessment Criteria - Required Outcome 1

Required Outcome 1 – No impact on strategic cropping land The activity will not result in any impact on strategic cropping land in the strategic cropping area	
Prescribed Solution	**Evidence / Response**
PS1: The application demonstrates the activity will not be carried out on strategic cropping land that meets the criteria stated in schedule 3, part 2.	The application does not seek to demonstrate that the area of the SCA to be impacted by the activity is not SCL

Table 10: SCA Assessment Criteria - Required Outcome 2

Required Outcome 2 - Managing impacts on strategic cropping land on property (SCL) in the strategic cropping area The activity will not result in a material impact on strategic cropping land on the property (SCL)	
Prescribed Solution	**Evidence / Response**
PS2: The application demonstrates all of the following—	
(a) if the applicant is not the owner of the land and has not entered into a voluntary agreement with the owner—the applicant has taken all reasonable steps to consult and negotiate with the owner of the land about the expected impact of carrying out the activity on strategic cropping land;	N/A – the applicant is the landholder
(b) the activity can not be carried out on land that is not strategic cropping land, including, for example, land elsewhere on the property (SCL), on adjacent land or at another nearby location;	The land mapped as SCL occurs over a pre-existing dam (Talinga Pond A). As the proposed activity is the construction of a new dam (Talinga Pond D) within this pre-existing disturbance area, there are no alternative locations for the activity.
(c) the construction and operation footprint of the activity on strategic cropping land on the property (SCL) is minimised to the greatest extent possible;	The construction and operation footprint of the activity on SCL has been minimised to the greatest extent possible, demonstrated by the following: – Being located within an area previously disturbed, which is not utilised as SCL and predominately being constrained to occur within previously disturbed areas (Talinga Pond A footprint and existing ROW of watering gathering line) – The ITP ROW has been minimised to the smallest corridor to allow for construction, temporary access tracks, stockpiling areas and adequate erosion and sediment controls
(d) if the activity will have a permanent impact on strategic cropping land on a property (SCL)—no more than 2% of the strategic cropping land on the property (SCL) will be impacted.	The proposed activity will not have a permanent impact on SCL as the pre-activity condition can be during rehabilitation of the area.

Table 11: SCA Assessment Criteria - Required Outcome 3

Required Outcome 3 The activity will not result in a material impact on strategic cropping land in an area in the strategic cropping area	
Prescribed Solution	**Evidence/Response**
PS3: (1) The application demonstrates all of the following—	

(a) the activity cannot be carried out on other land in the area that is not strategic cropping land, including, for example, land elsewhere on the property (SCL), on adjacent land or at another nearby location;	The proposed activity cannot be located elsewhere as the proposed activity is constrained to the location of the existing Talinga Pond A dam. The soil remediation area is required to occur within this area to remediate the existing contaminated soil within the dam and the new Talinga Pond D is proposed within the existing dam footprint to minimise disturbance elsewhere on the land.
(b) if there is a regional plan for the area in which the activity is to be carried out—the activity will contribute to the regional outcomes, and be consistent with the regional policies, stated in the regional plan;	The relevant regional plan is the Darling Down Regional Plan. The plans main objective is to prioritise land use for regional interests. The activity is consistent with this plan as it doesn't impact SCA in addition to what is already disturbed by the existing pond (Talinga Pond A).
(c) the construction and operation footprint of the activity on strategic cropping land is minimised to the greatest extent possible;	Impacts to SCL have been minimised to the greatest extent possible by being located within an area of an existing pond footprint.
(d) either – (i) the activity will not have a permanent impact on the strategic cropping land in the area; or (ii) the mitigation measures proposed to be carried out if the chief executive decides to grant the approval and impose an SCL mitigation condition.	The activity will not have a permanent impact on the SCL as the pre-activity condition of the land can be restored during rehabilitation activities.
(2) Subsection (3) applies for each property (SCL) on which the activity is to be carried out if the applicant is not the owner of the land and has not entered into a voluntary agreement with the owner.	N/A – the applicant is the owner of the land

13. References

AECOM, 2014. Environmental Site Assessment Report – Talinga A Dam Remediation. AECOM Australia Pty Ltd.

Butler Partners, 2003. Geotechnical Investigation Proposed Evaporation Pond Talinga Gas Fields. Prepared for Oil Company of Australia Limited.

Appendix A, Figures

Legend

Existing Infrastructure

- Pipeline

Proposed Infrastructure

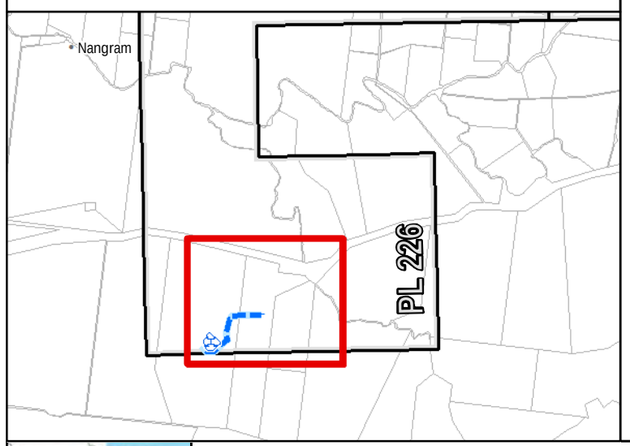
- Inter Pond Transfer Pipeline
- Fence
- Stockpile / Laydown
- Pump Station
- Soil Remediation Area
- Talinga Ponds B, & C
- Talinga Pond D

Regional Interest Area

- Priority Agricultural Area
- Strategic Cropping Land

Boundary

- Surveyed Cadastral



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Scale 1:15,000 (at A3)

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Metres

Coordinate System: GDA 1994 MGA Zone 56

Rev	Description	Drawn	Check	QA	Approved	Date
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0	Issued For Use	SAW	LA	GNH	SD	08/04/2016
B	Issued For Review	SAW	LA	GNH		04/04/2016
A	Issued For Review	SAW	LA	GNH		17/03/2016

origin

Regional Interest Development Area
Walloons - Talinga Pond Infrastructure Overview

1RG491 and 32RG247 Date: 8 April 2016

Map Number	Doc No	Rev
1 of 1	Q-4100-15-EA-030	1
	Map ID GISWR_30635	

S:\Data\Work_Requests\GISWR_30501 to 31000\GISWR_30635\Rev1\GISWR_30635_OV_Rev1.mxd

Legend

Existing Infrastructure
- Pipeline

Proposed Infrastructure
- Inter Pond Transfer Pipeline
- Fence
- Stockpile / Laydown
- Pump Station
- Soil Remediation Area
- Talinga Pond D

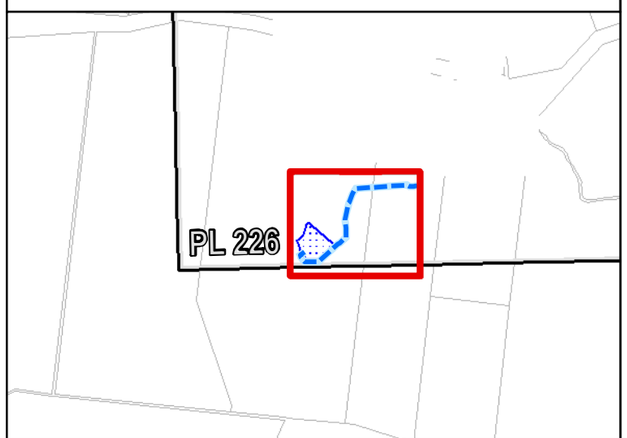
Integrated Regional Ecosystems (RE) Biodiversity Status

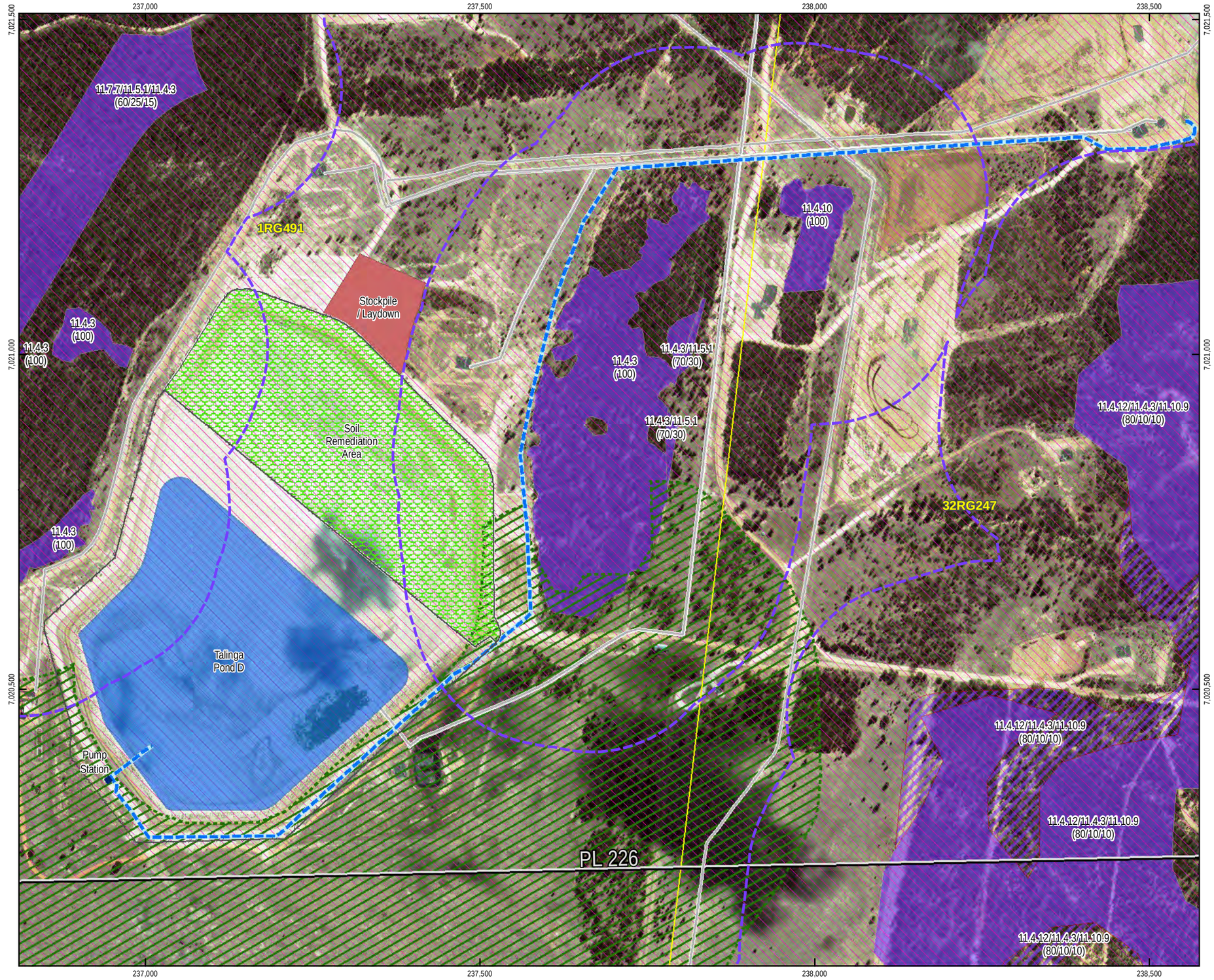
Remnant Vegetation
- Endangered RE

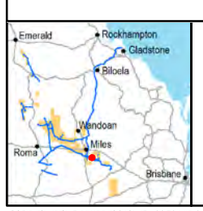
Regrowth Vegetation
- Contains Endangered RE
- 200m Endangered RE Buffer

Regional Interest Areas
- Priority Agricultural Area
- Strategic Cropping Land

Boundary
- Surveyed Cadastral







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Metres

Coordinate System: GDA 1994 MGA Zone 56

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B	Issued For Review	SAW	LA	GNH		04/04/2016
A	Issued For Review	SAW	LA	GNH		17/03/2016

origin

Regional Interest Development Area
Walloons - Talinga Pond D

1RG491 and 32RG247 Date: 8 April 2016

Map Number 1 of 1

Doc No Q-4100-15-EA-030

Map ID GISWR_30635

Rev 1

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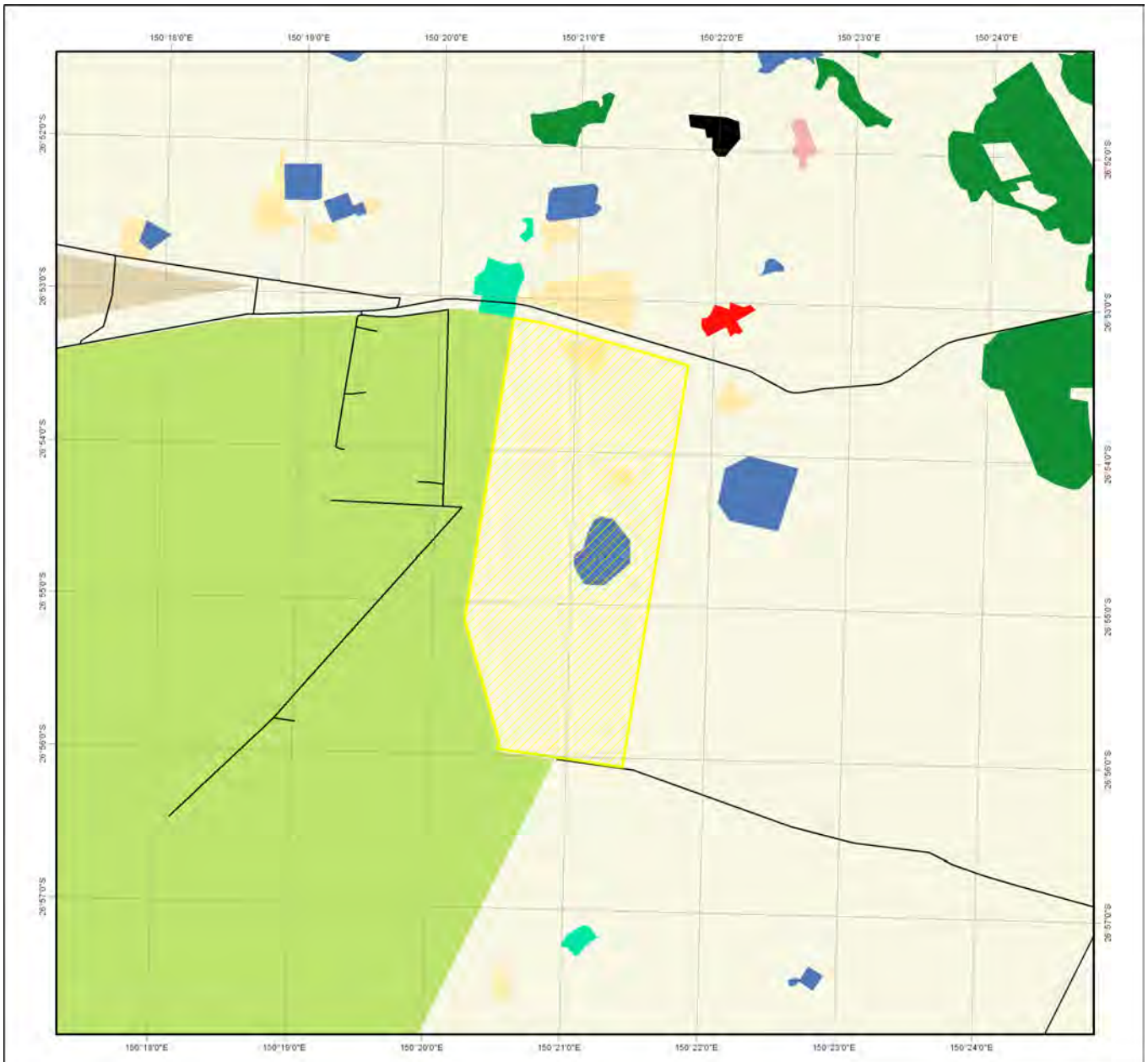
Appendix B, External Mapping



Land Use

Queensland Land Use Mapping Program

Legend
ALUM v7 Secondary level

- Lot and Plan
- Nature conservation
- Managed resource protection
- Other minimal use
- Grazing native vegetation
- Production forestry
- Plantation forestry
- Grazing modified pastures
- Cropping
- Perennial horticulture
- Seasonal horticulture
- Land in transition
- Irrigated plantation forestry
- Irrigated modified pastures
- Irrigated cropping
- Irrigated perennial horticulture
- Irrigated seasonal horticulture
- Irrigated land in transition
- Intensive horticulture
- Intensive animal husbandry
- Manufacturing and industrial
- Residential
- Services
- Utilities
- Transport and communication
- Mining
- Waste treatment and disposal
- Lake
- Reservoir/dam
- River
- Channel/aquedeuct
- Marsh/wetland
- Estuary/coastal waters
- Freeways / motorways; Highways
- Secondary roads; Streets

N

0 490 980 1,470 1,960 2,450 m

This product is projected into:
GDA 1994 Queensland Albers

The land use dataset is a product of the Queensland Land Use Mapping Program (QLUMP). This data has a nominal scale of 1:50,000 in coastal regions and 1:100,000 in western Queensland. Land use is classified according to the Australian Land Use and Management Classification (ALUMC) Version 7. This map presents the most current land use information available in Queensland at the secondary level of the ALUMC, including the land use mapping products from 1999, 2006, 2009, 2011, 2012 and 2013.

The ALUMC has a three-level hierarchical structure. QLUMP map the land use consistently to the secondary level of ALUMC—as presented in this map. Some land uses that fall under our minimal mapping unit of 2 hectares are not explicitly mapped but aggregated into the surrounding land use classes.

Further information relating to land use mapping can be found at http://www.qld.gov.au/environment/land/vegetation/mapping/qlump/ and www.abares.gov.au/landuse/

While every care is taken to ensure the accuracy of this information, the Department of Science, Information Technology and Innovation makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the information being inaccurate or incomplete in any way and for any reason.

Land Use

Queensland Land Use Mapping Program

Legend
ALUM v7 Secondary level

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- Other minimal use
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- Grazing modified pastures
- Cropping
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- Seasonal horticulture
- Land in transition
- Irrigated plantation forestry
- Irrigated modified pastures
- Irrigated cropping
- Irrigated perennial horticulture
- Irrigated seasonal horticulture
- Irrigated land in transition
- Intensive horticulture
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- Waste treatment and disposal
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FORAGE REPORT: CROP FREQUENCY

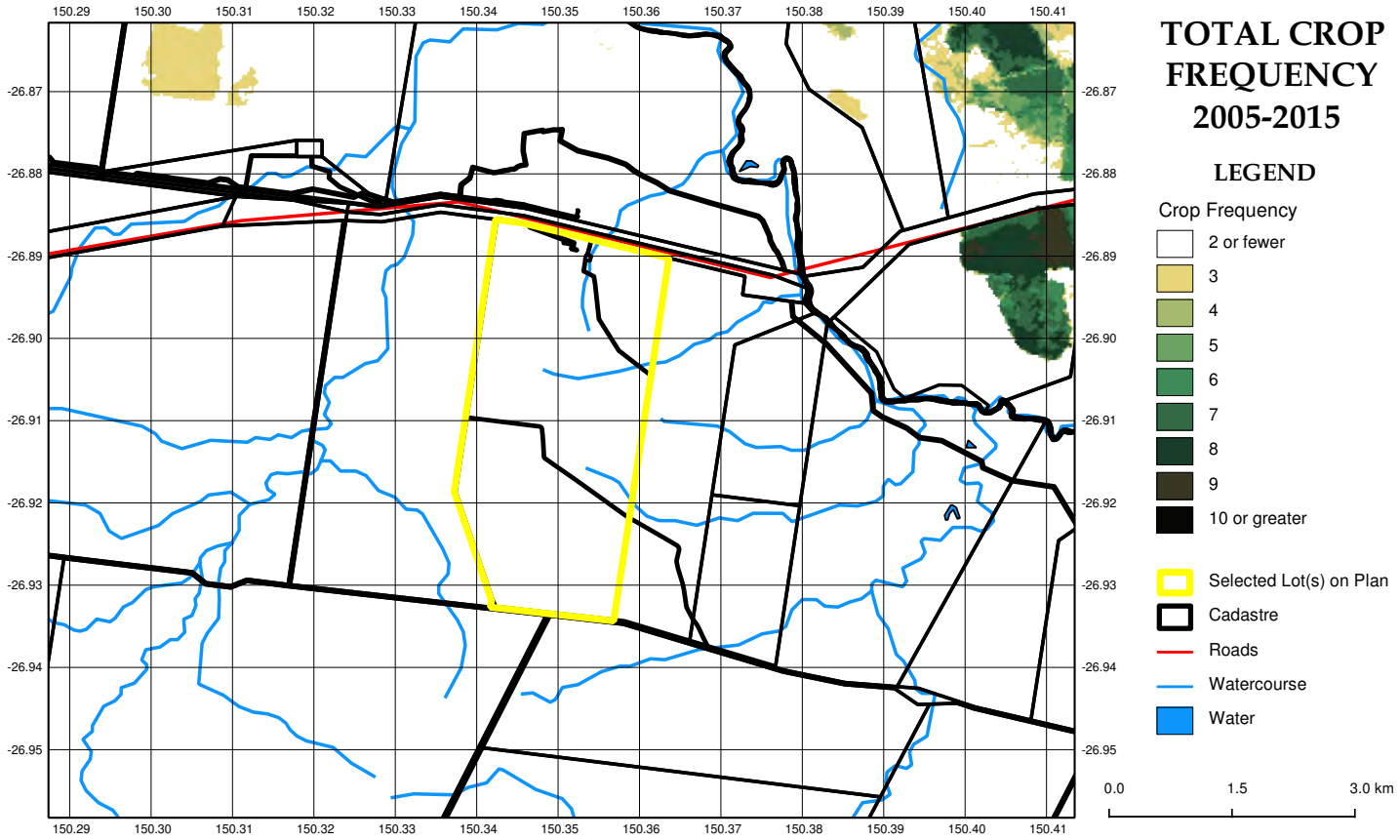
http://www.longpaddock.qld.gov.au/forage *March 22, 2016* *Lot on Plan: 1RG491* *Label: None*

Queensland Government

Introduction

This report presents crop frequency information for your chosen area, for the time period selected. The report is for a minimum ten year period between 1988 and 2013. The report includes crop frequency mapping which is based on time series analysis of Landsat satellite imagery over the summer and winter growing seasons. The approach is based on detection of annual cycles of greenness, therefore some perennial crops may not be represented. Snapshots of composite Landsat imagery for February and September for each year are also provided. For further information, refer to the FORAGE User Guide (http://www.longpaddock.qld.gov.au/forage/forage_user_guide.pdf).

Annual crop frequency map for 2005 - 2015



How to interpret the information

Crop frequency mapping: Coloured areas on the map indicate locations where active crops have been detected three or more times in the summer and winter growing seasons, for a minimum ten year period. The map on this page shows 'Total Frequency' and is a count of number of years in which an active crop was detected. The two maps on the following page show the summer and winter crop frequency. These maps show a count of the number of times an active crop was detected in each of those growing seasons. The detection of active crops is based on time-series analysis of Landsat satellite imagery. Due to limitations of the automated method used to detect active cropping, you should also view the Landsat satellite imagery snapshots to confirm the presence or absence of cropping.

Landsat satellite imagery: The summer (February) and winter (September) Landsat imagery snapshots on the following pages help confirm the presence of an active crop. Each snapshot is designed to optimise the identification of winter and summer cropping and is generated from a number of images acquired within the growing season. The cropped areas will generally appear bright green in the imagery compared with the surrounding landscape. Even if the crop frequency mapping does not indicate cropping in an area, it is important to check each Landsat image to confirm that cropping has not been undertaken. Sometimes it will not be possible to clearly identify cropped areas in the imagery. For example, in some wetter seasons, much of the imagery can appear very green and cropping may be difficult to identify. Where this is the case, it is recommended to undertake further investigation using other information sources.

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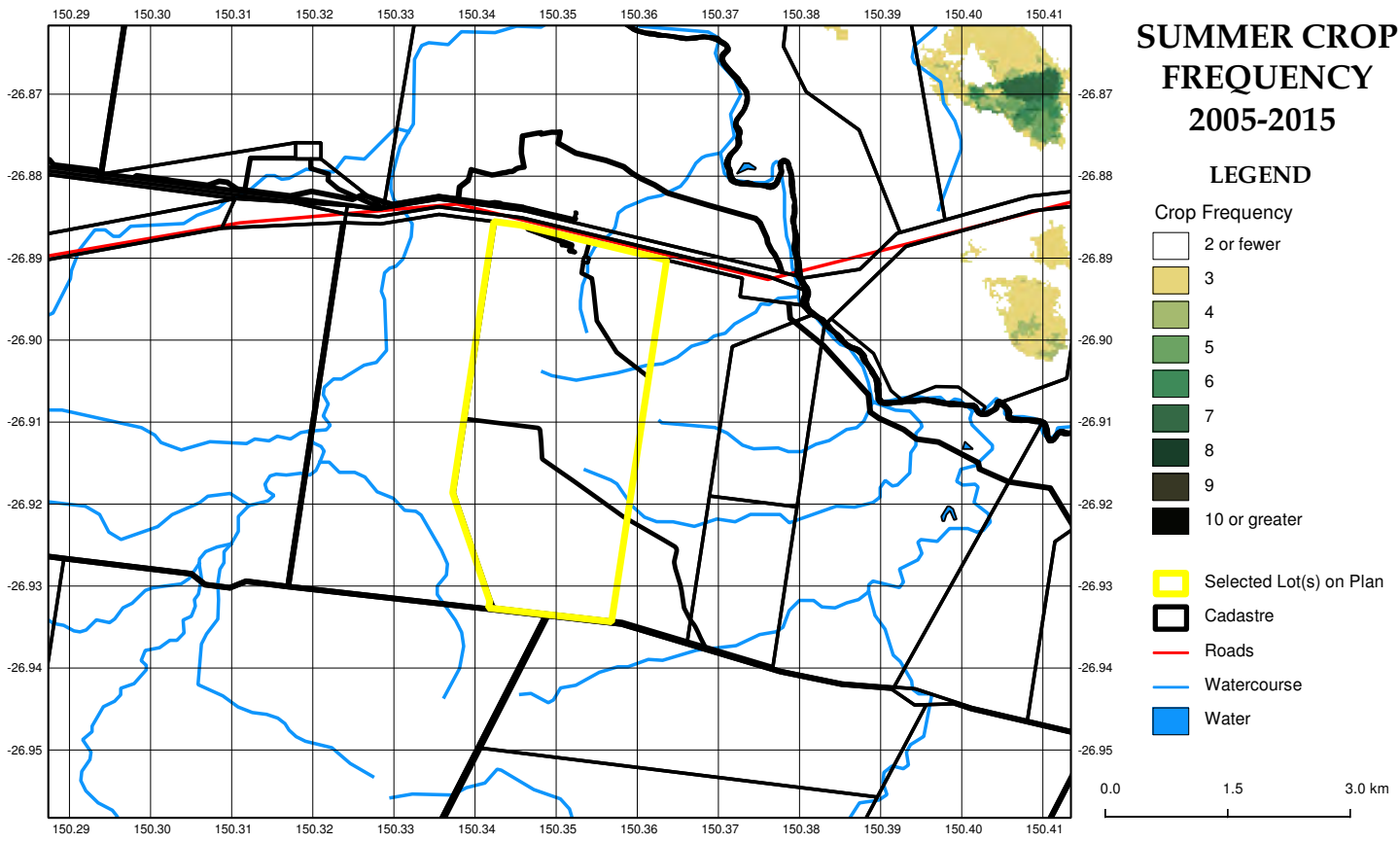
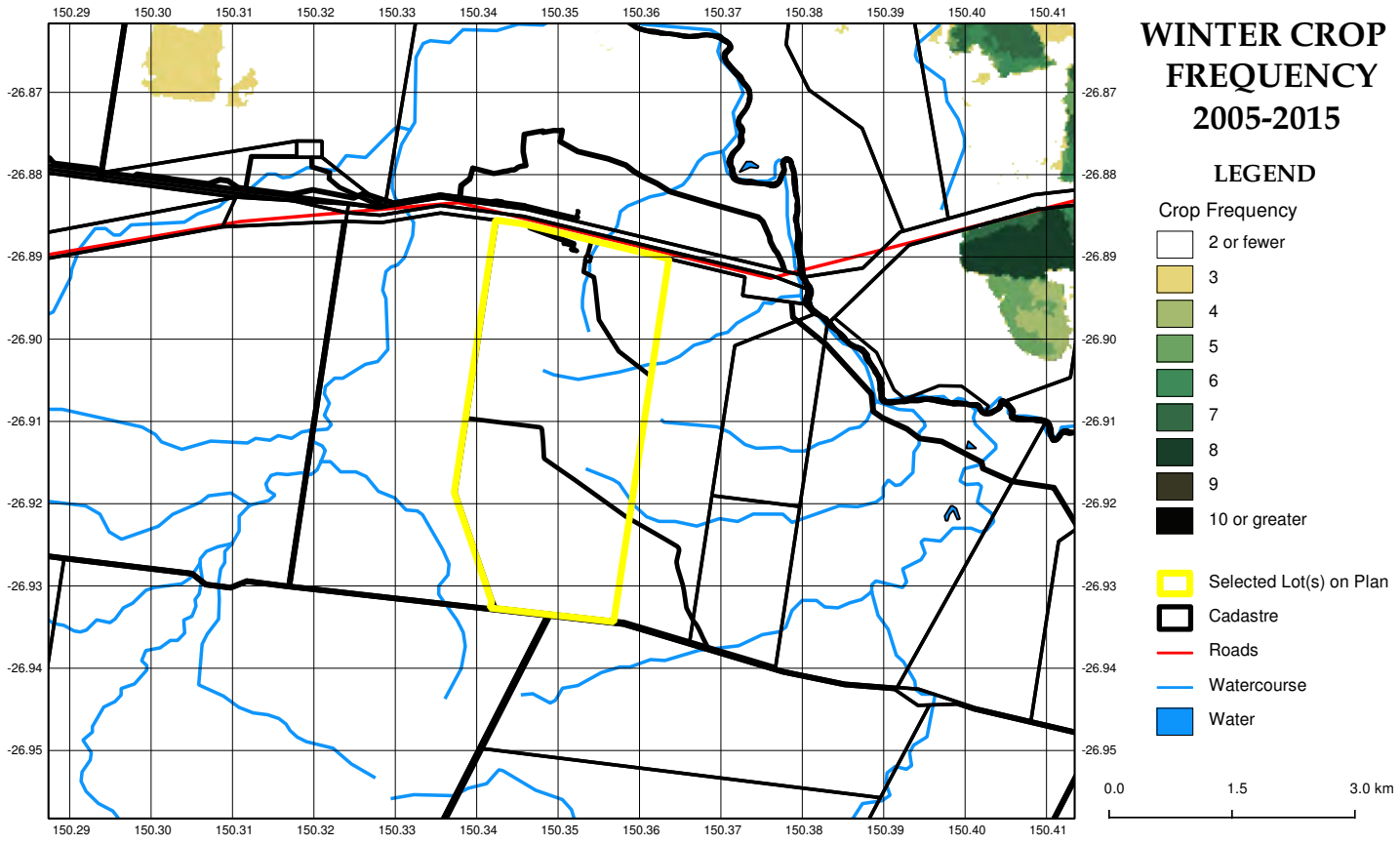
Queensland Government

Summer (February) crop frequency map for 2005 - 2015



Winter (September) crop frequency map for 2005 - 2015

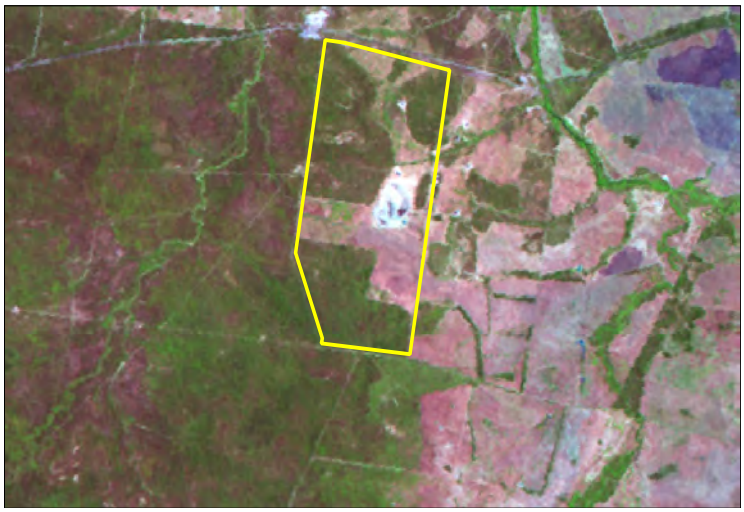
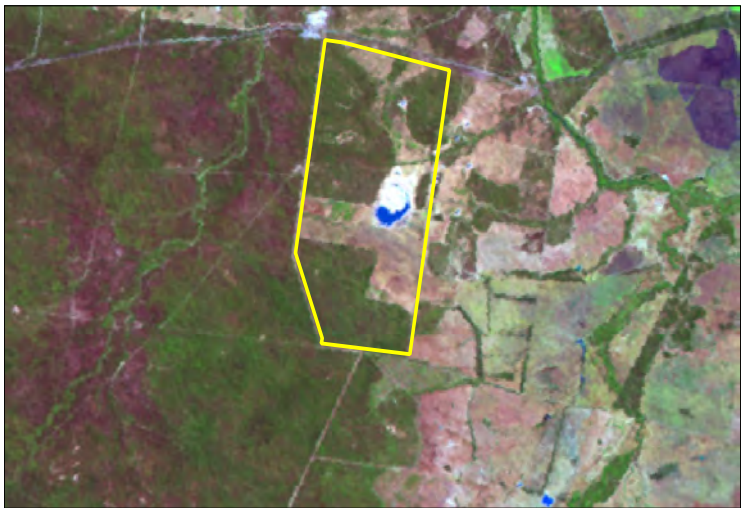


FORAGE REPORT: CROP FREQUENCY

http://www.longpaddock.qld.gov.au/forage *March 22, 2016* *Lot on Plan: 1RG491* *Label: None*

Queensland Government

February (left) and September (right) images for 2005

February (left) and September (right) images for 2006


February (left) and September (right) images for 2007


FORAGE REPORT: CROP FREQUENCY

http://www.longpaddock.qld.gov.au/forage *March 22, 2016* *Lot on Plan: 1RG491* *Label: None*

Queensland Government

February (left) and September (right) images for 2008


February (left) and September (right) images for 2009


February (left) and September (right) images for 2010


FORAGE REPORT: CROP FREQUENCY

http://www.longpaddock.qld.gov.au/forage *March 22, 2016* *Lot on Plan: 1RG491* *Label: None*

Queensland Government

February (left) and September (right) images for 2011


February (left) and September (right) images for 2012


February (left) and September (right) images for 2013


FORAGE REPORT: CROP FREQUENCY

http://www.longpaddock.qld.gov.au/forage *March 22, 2016* *Lot on Plan: 1RG491* *Label: None*

Queensland Government

February (left) and September (right) images for 2014

February (left) and September (right) images for 2015

FORAGE REPORT: CROP FREQUENCY

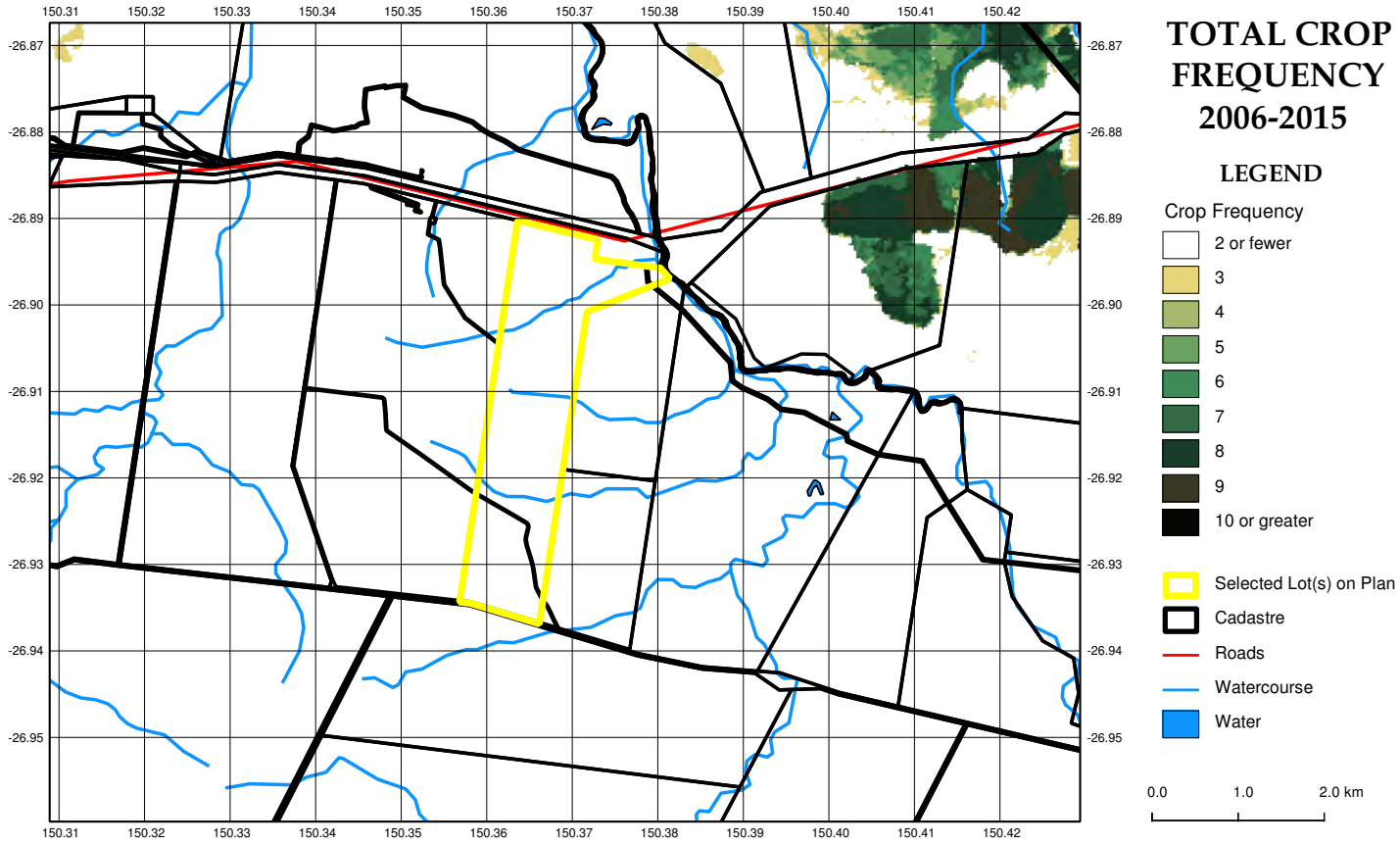
http://www.longpaddock.qld.gov.au/forage *March 22, 2016* *Lot on Plan: 32RG247* *Label: None*

Queensland Government

Introduction

This report presents crop frequency information for your chosen area, for the time period selected. The report is for a minimum ten year period between 1988 and 2013. The report includes crop frequency mapping which is based on time series analysis of Landsat satellite imagery over the summer and winter growing seasons. The approach is based on detection of annual cycles of greenness, therefore some perennial crops may not be represented. Snapshots of composite Landsat imagery for February and September for each year are also provided. For further information, refer to the FORAGE User Guide (http://www.longpaddock.qld.gov.au/forage/forage_user_guide.pdf).

Annual crop frequency map for 2006 - 2015



How to interpret the information

Crop frequency mapping: Coloured areas on the map indicate locations where active crops have been detected three or more times in the summer and winter growing seasons, for a minimum ten year period. The map on this page shows 'Total Frequency' and is a count of number of years in which an active crop was detected. The two maps on the following page show the summer and winter crop frequency. These maps show a count of the number of times an active crop was detected in each of those growing seasons. The detection of active crops is based on time-series analysis of Landsat satellite imagery. Due to limitations of the automated method used to detect active cropping, you should also view the Landsat satellite imagery snapshots to confirm the presence or absence of cropping.

Landsat satellite imagery: The summer (February) and winter (September) Landsat imagery snapshots on the following pages help confirm the presence of an active crop. Each snapshot is designed to optimise the identification of winter and summer cropping and is generated from a number of images acquired within the growing season. The cropped areas will generally appear bright green in the imagery compared with the surrounding landscape. Even if the crop frequency mapping does not indicate cropping in an area, it is important to check each Landsat image to confirm that cropping has not been undertaken. Sometimes it will not be possible to clearly identify cropped areas in the imagery. For example, in some wetter seasons, much of the imagery can appear very green and cropping may be difficult to identify. Where this is the case, it is recommended to undertake further investigation using other information sources.

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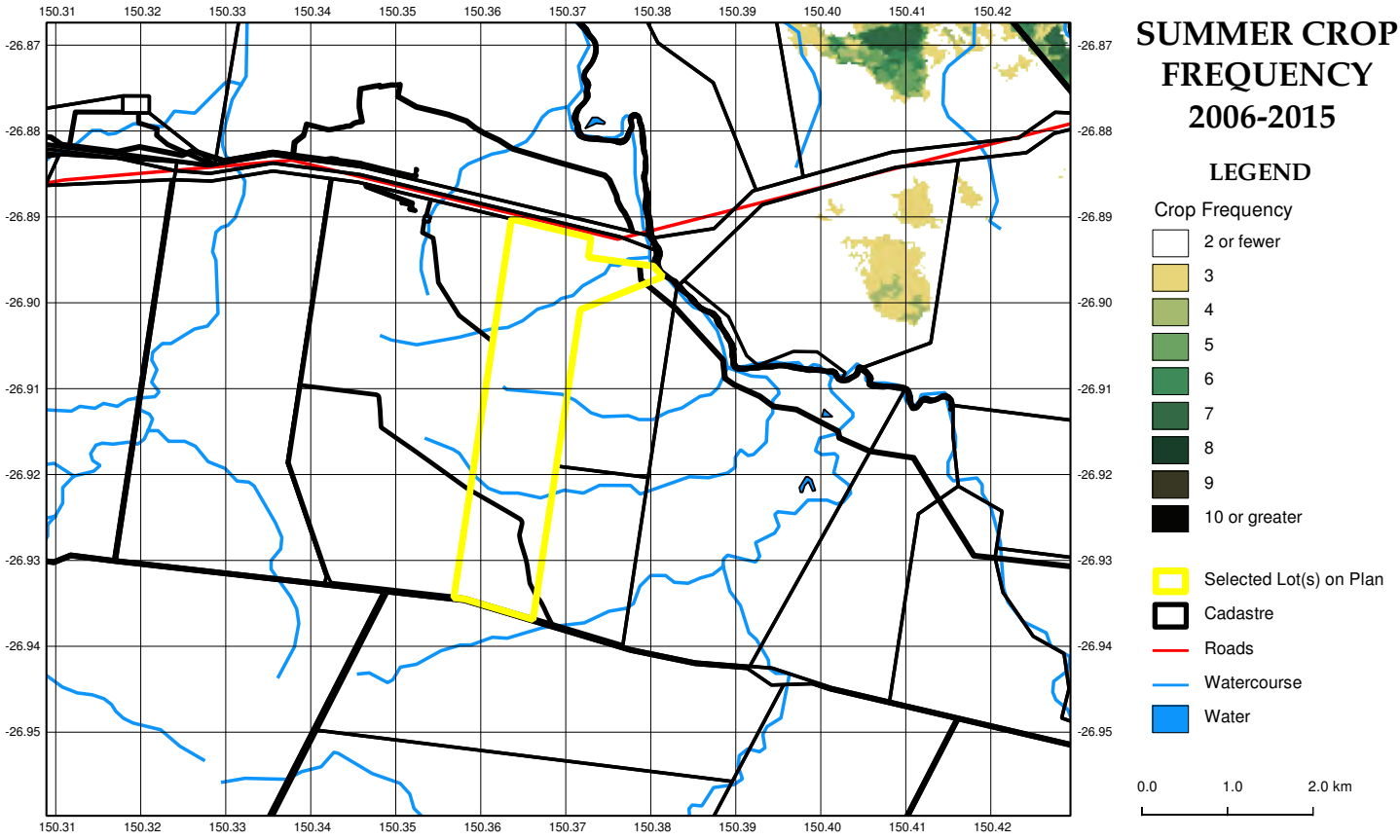
FORAGE REPORT: CROP FREQUENCY

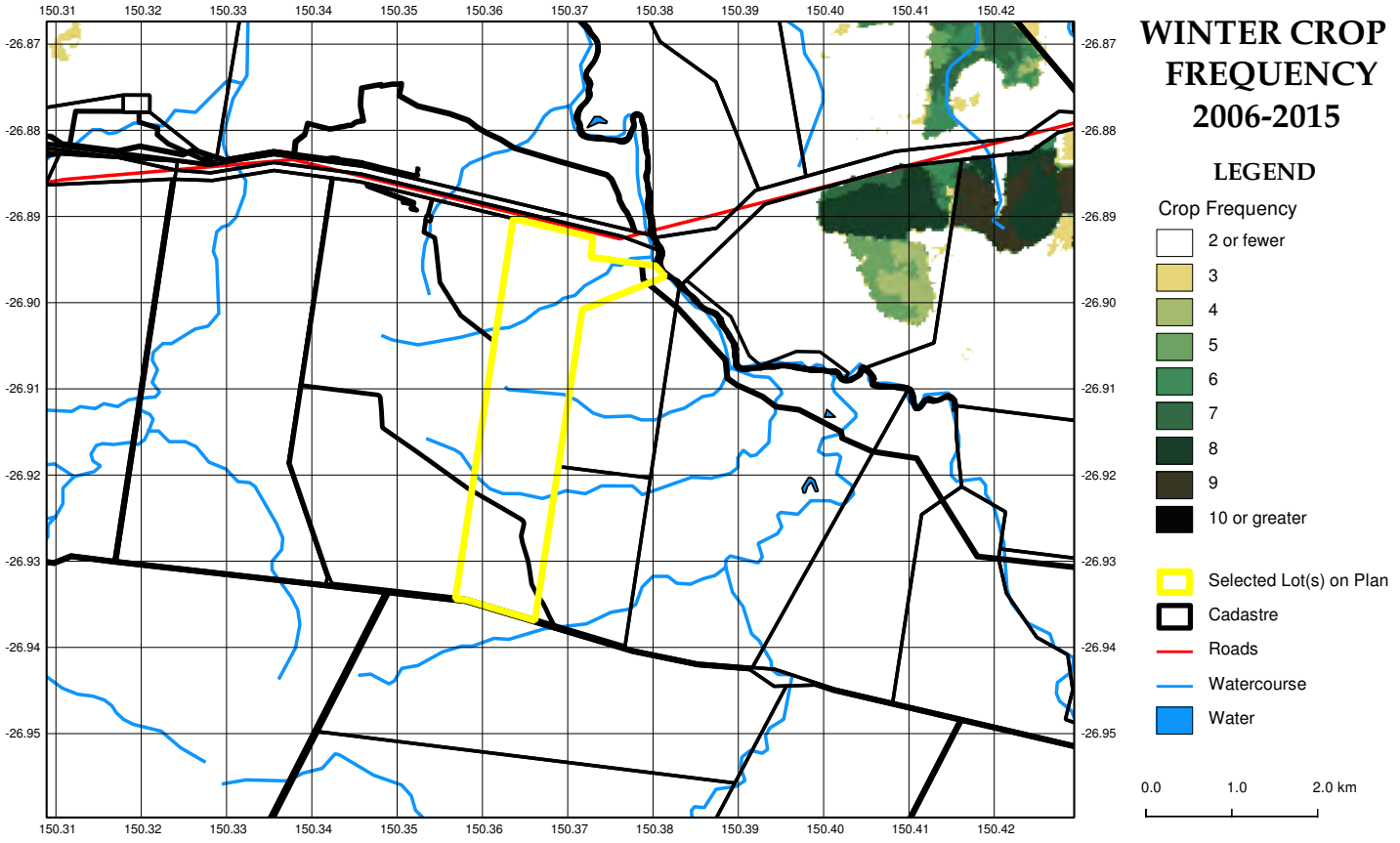
http://www.longpaddock.qld.gov.au/forage *March 22, 2016* *Lot on Plan: 32RG247* *Label: None*

Queensland Government

Summer (February) crop frequency map for 2006 - 2015



Winter (September) crop frequency map for 2006 - 2015

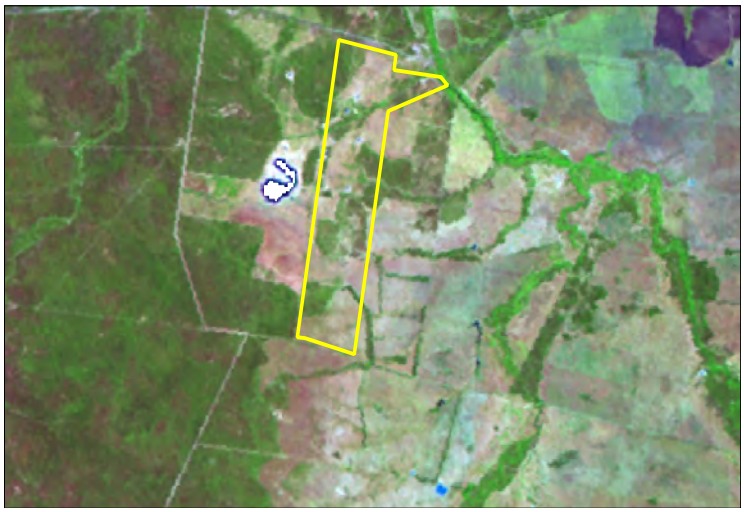


FORAGE REPORT: CROP FREQUENCY

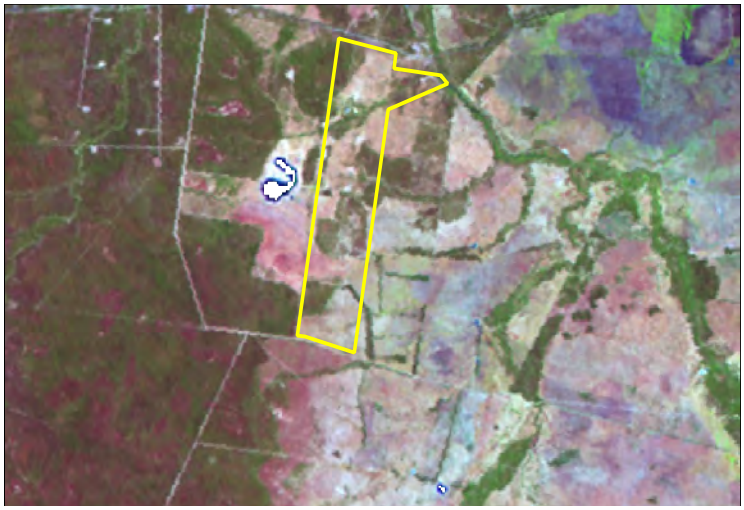
http://www.longpaddock.qld.gov.au/forage *March 22, 2016* *Lot on Plan: 32RG247* *Label: None*

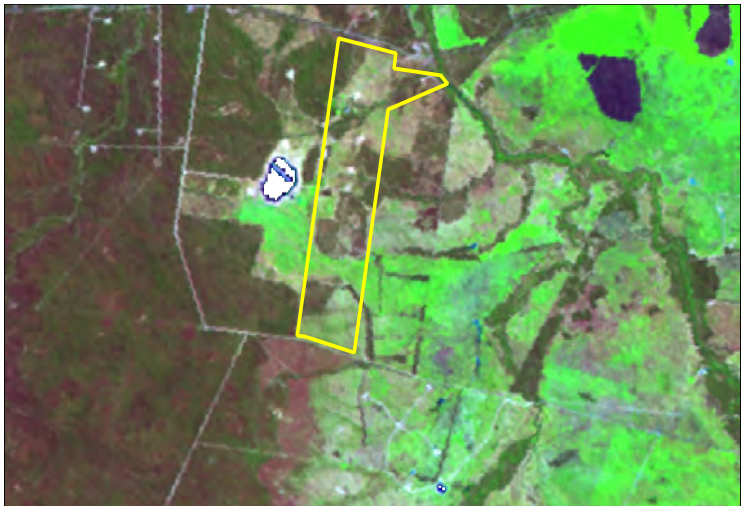
Queensland Government

February (left) and September (right) images for 2006

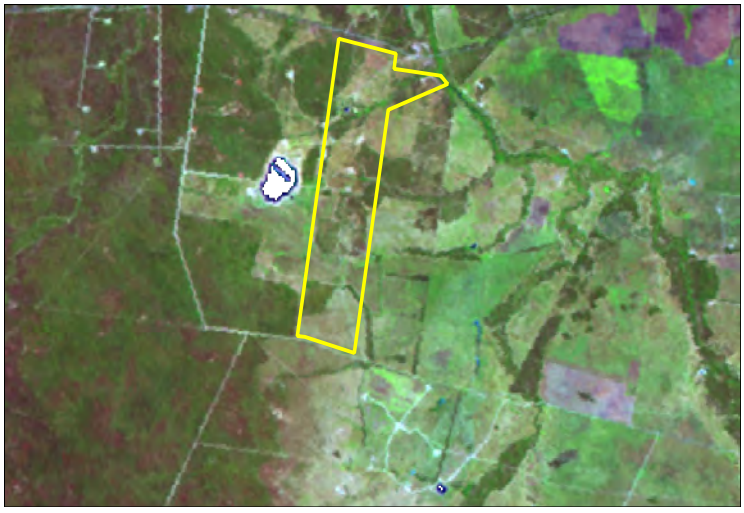


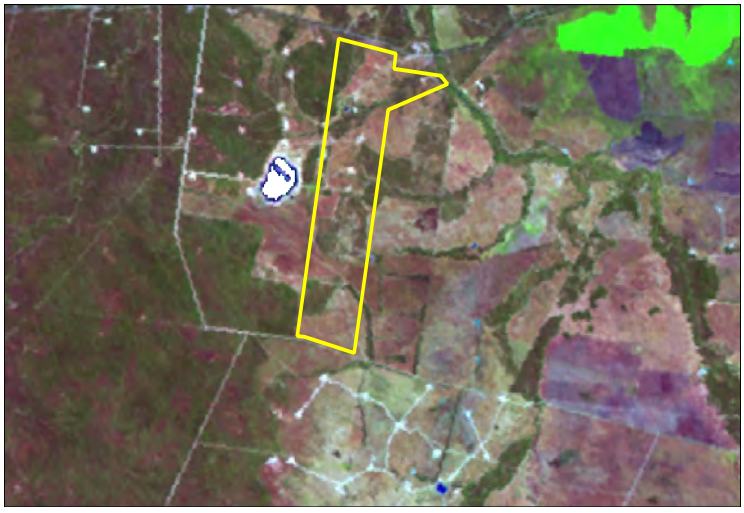
February (left) and September (right) images for 2007





February (left) and September (right) images for 2008



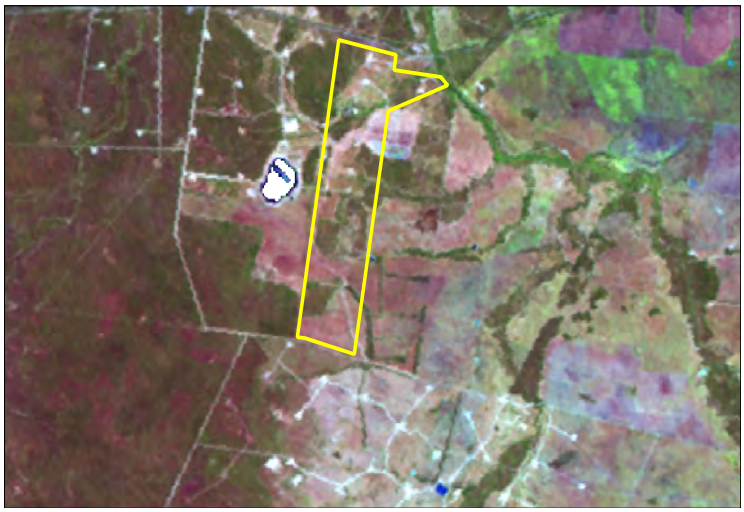
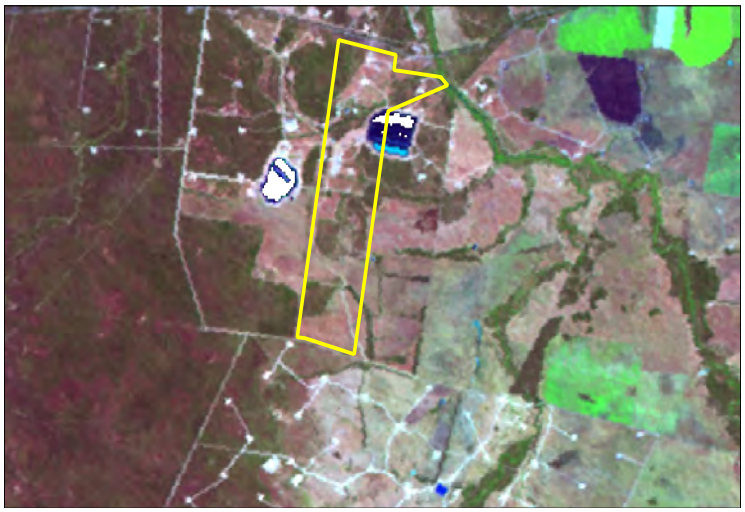


FORAGE REPORT: CROP FREQUENCY

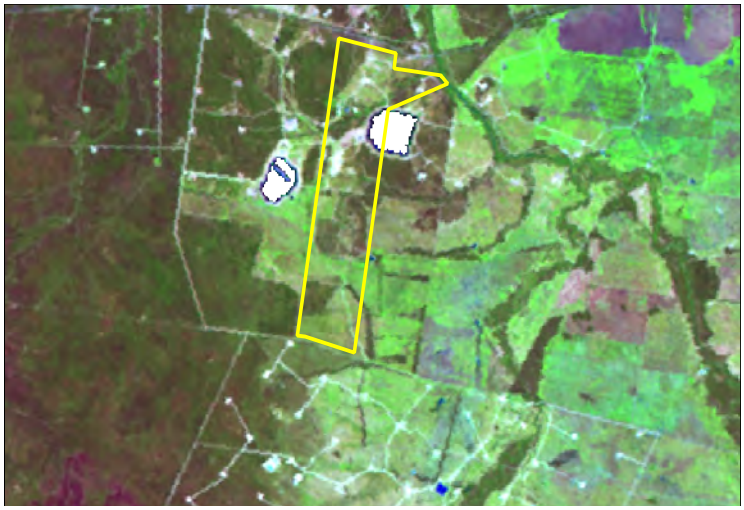
http://www.longpaddock.qld.gov.au/forage *March 22, 2016* *Lot on Plan: 32RG247* *Label: None*

Queensland Government

February (left) and September (right) images for 2009

February (left) and September (right) images for 2010




February (left) and September (right) images for 2011


FORAGE REPORT: CROP FREQUENCY

http://www.longpaddock.qld.gov.au/forage *March 22, 2016* *Lot on Plan: 32RG247* *Label: None*

Queensland Government

February (left) and September (right) images for 2012


February (left) and September (right) images for 2013


February (left) and September (right) images for 2014


FORAGE REPORT: CROP FREQUENCY

http://www.longpaddock.qld.gov.au/forage *March 22, 2016* *Lot on Plan: 32RG247* *Label: None*

Queensland Government

February (left) and September (right) images for 2015

Appendix C, Referenced Documents