



Our ref: OUT22/3245

Department of
**State Development, Infrastructure,
Local Government and Planning**

Mr Andrew Hall
Team Lead Access Approvals
Arrow Energy
e-mail: andrew.hall@arrowenergy.com.au

5 August 2022

Dear Mr Hall

Requirement notice

RPI22/004 Arrow – Kapunn Springvale CSG Deviated Well Paths (Given under s44 of the *Regional Planning Interests Act 2014* (RPI Act))

I refer to your application received on 22 July 2022 September 2021 for a regional interests development approval (RIDA) under section 29 of the *Regional Planning Interests Act 2014* (RPI Act) for the Kapunn Springvale Coal Seam Gas (CSG) Deviated Well Paths project. The application seeks approval for resource activities: petroleum and gas on Lot 11 SP191489, Lot 141 AG4261, Lot 1 RP78475, Lot 1 RP83755, Lot 55 DY592 and Lot 56 DY592 within the priority agricultural area (PAA) and the strategic cropping area (SCA).

Application details

Applicant Arrow Energy Pty Ltd – ABN 73 078 521 936
Arrow (Tipton) Pty Ltd – ABN 17 114 927 507
Arrow (Tipton Two) Pty Ltd – ABN 36 117 853 755
Arrow CSG (Australia) Pty Ltd – ABN 54 054 260 65.

Project Kapunn Springvale CSG Deviated Well Paths

Site Details

Street address Springvale Road, Springvale 4405
110 Prenzlars Road, St Ruth 4405
455 Hennings Road, Springvale 4405
Kupunn Duleen Road, Ducklo 4405
584 Springvale Road, Springvale 4405
445 Springvale Road, Springvale 4405

1 William Street
Brisbane Qld 4000
PO Box 15009 City East
Queensland 4002 Australia
Telephone 13 QGOV (13 74 68)
Website www.dsdilgp.qld.gov.au
ABN 25 166 523 889

Real property description	Lot 11 SP191489, Lot 141 AG4261, Lot 1 RP78475, Lot 1 RP83755, Lot 55DY592 and Lot 56 DY592
Area of regional interest	PAA and SCA
Proposed PAA disturbance area	0 ha
Proposed SCA disturbance area	0 ha
Local government area	Western Downs Regional Council

Public notification requirement

Pursuant to section 34(4) of the RPI Act, it has been determined that the application requires notification. The reason for the decision is that the delegate for the chief executive has determined that it is in the public interest for the application to be publicly notified.

In accordance with section 35 of the RPI Act, you are required to publish a notice about the application in the way prescribed in section 13 of the Regional Planning Interests Regulation 2014 (RPI Regulation) and give the owners of the land notice about the application.

Public notification must commence within 10 business days of providing the information required to assist in the assessment of the application.

The notification period is 15 business days, with the closing date being the day that is after the end of the notification period. The approved form for public notification is available on the Department of State Development, Infrastructure, Local Government and Planning's website at <https://planning.statedevelopment.qld.gov.au/planning-issues-and-interests/areas-of-regional-interest#helpful-information>

You are also referred to the RPI Act Statutory Guideline 06/14 Public notification of assessment applications at <https://dsdmipprd.blob.core.windows.net/general/rpi-guideline-06-14-notification-requirements-under-rpi.pdf> for further information.

Information requirement

Further information is required to assist in the assessment of the application against the assessment criteria contained in the RPI Act and RPI Regulation.

The further information required is detailed in **Attachment A**.

The period in which the information must be provided is a maximum of three months from the date of this notice. An extension to this period may be requested if necessary.

Another requirement notice may be given if, for example, the response to this requirement notice does not provide sufficient information to assess and decide the application.

If you require any further information, please contact Ms Morag Elliott, Manager, Planning Group, Department of State Development, Infrastructure, Local Government and Planning, by telephone on (07) 3452 7653 or by email at morag.elliott@dsdilgp.qld.gov.au who will be pleased to assist.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Phil Joyce', with a horizontal line extending from the end of the signature.

Phil Joyce
Director
Development Assessment Division
Planning Group

Enc Attachment A

ATTACHMENT A

The Department of Agriculture and Fisheries (DAF), the Department of Resources (Resources) and the Department of Regional Development, Manufacturing and Water (DRDMW) are the assessing agencies for the application. The application was also referred to the Gasfields Commission Queensland (GFCQ) for advice.

DAF, Resources, DRDMW and GFCQ require the following information for assessment of the RIDA application against PAA and SCA criteria - Schedule 2, Part 1 and Part 4 of the Regional Planning Interests Regulation 2014 .

1.	<p><u>Issue:</u></p> <p>It is not clear if Figure 1-1 on page 6 of the Report to accompany an assessment application for a RIDA (Supporting report) is the same as referred to in Table 1-1 at s1.3, s1.7.2 and on page 64.</p> <p><u>Actions:</u></p> <p>Confirm that the figure on page 6 is Figure 1-1 and update the Supporting report accordingly.</p>
2.	<p><u>Issue:</u></p> <p>s1.6.3 of the Supporting report:</p> <ul style="list-style-type: none"> • refers to Table 3, however, no Table 3 is provided • refers to coexistence and the creation of 12 commitments to coexistence in the Surat Basin in 2012, and refers to the establishment of community reference groups • states that a draft Construction and Operations simultaneous operations matrix (SIMOPS) has been developed. <p><u>Actions:</u></p> <p>(a) Update the Supporting report (including Table of contents) to include Table 3 as referenced in s1.6.3.</p> <p>(b) To demonstrate compliance with Prescribed solution (1) (a) of Required outcome (RO) 2:</p> <ol style="list-style-type: none"> (i) Provide details to demonstrate how these commitments are being implemented. (ii) Confirm and detail if these commitments have been updated since 2012 to remain contemporary (iii) Confirm that the community reference groups (including the IFL Committee) still meet and if so, how often. (iv) Provide a copy of the draft SIMOPS. (v) Advise whether the SIMOPS has been tested in the field and if so, provide the outcomes.
3.	<p><u>Issue:</u></p> <p>s1.6.4 on page 11 of the Supporting report refers to Area Wide Planning (AWP).</p> <p><u>Actions:</u></p> <p>To demonstrate compliance with prescribed solution (1) (a) of required outcome 2:</p> <ol style="list-style-type: none"> (a) Advise whether the owners of the lots subject to this application and neighbouring landholders have been involved in the AWP process. (b) Provide information regarding the outcomes to support coexistence.

4.	<p><u>Issue:</u></p> <p>The Wayleave agreement (and crossing agreement) referred to in s1.7.4 of the Supporting report concerns Lot 1 RP83755. However, there is no rail line on that lot and there are no rail interests detailed on the lot's title deed. This agreement may concern the adjacent Lot 92 SP129747.</p> <p><u>Actions:</u></p> <p>Update the Supporting report as required. If the agreement concerns Lot 1 RP83755, provide summaries and conditions of these agreements, including details on anticipated surface impacts associated with the authorised works including scope, extent, location, and timing.</p>
5.	<p><u>Issue:</u></p> <p>s2.1, s3 or s4 of the Supporting report do not detail the depths of well paths entry and terminal points (i.e., the end point of the well path), the well path trajectories and surface area subject to dial before you dig requirements and latitude and longitude coordinates for these matters.</p> <p><u>Actions:</u></p> <p>Update the Supporting report to include these details in both a table format and accompanying 3D maps for each lot subject to the proposed activity.</p>
6.	<p><u>Issue:</u></p> <p>Table 2-2 and Appendix 2 of the Supporting report details the properties subject of the application. However, the application does not provide the title deeds of the other lots that comprise these properties.</p> <p><u>Actions:</u></p> <p>Update the Supporting report by providing:</p> <ul style="list-style-type: none"> (a) Title deeds for all lots that make up properties subject to the application (b) A map of the surrounding areas to those properties detailing the extent of the properties as well as the lot on plan and ownership details for all neighbouring and adjacent lots.
7.	<p><u>Issue:</u></p> <p>It is unclear whether Figure 2-1 on page 16 of the Supporting report is the same as referred to in s1.2 on page 4, Table 1-1 on page 5, s2.2 and s2.3 on page 14 and s3.2.1 on page 19.</p> <p><u>Actions:</u></p> <ul style="list-style-type: none"> (a) Confirm that the figure on page 16 is Figure 2-1 and update the Supporting report accordingly. (b) Update the legend on the figure on page 16 to include the referred to s2.3.1 on page 14.
8.	<p><u>Issue:</u></p> <p>s2.3.3 of the Supporting report details overlapping resource authorities. However, the narrative is not clear on the implications for any (future) proposed activity under that resource tenure if the proposed activity subject to this application is approved.</p> <p><u>Actions:</u></p> <p>Update the Supporting report to note the consequences of the area available for permitted impacts to priority agricultural land uses (PALUs) resulting from other proposed, and cumulative, impacts.</p>

9.	<p><u>Issue:</u></p> <p>s3.2.1 of the Supporting report does not detail the water and gas extraction area for each well.</p> <p><u>Actions:</u></p> <p>Update the Supporting report to provide indicative locations of gas and water extraction areas for each deviated well.</p>
10.	<p><u>Issue:</u></p> <p>Insufficient information is provided in s3.2.1 (and s4.4.1 and Appendix 3) of the Supporting report to determine if the dial before you dig requirement areas will constrain, prevent, or restrict the use of those areas for PALU or everyday farming practices or infrastructure essential to the operation of a PALU on the respective properties.</p> <p><u>Actions:</u></p> <p>(a) Update the Supporting report to discuss any implications of the dial before you dig requirements.</p> <p>(b) Provide updated figures to include these surface areas.</p>
11.	<p><u>Issue:</u></p> <p>s3.2.1 of the Supporting report states that operational activities will be undertaken remotely.</p> <p><u>Actions:</u></p> <p>Confirm whether operational activities include workovers and whether workover activities will require access to the sub-terranean land as a preliminary activity and the likely impacts to landholders.</p>
12.	<p><u>Issue:</u></p> <p>s3.3 of the Supporting report does not discuss what the likely impacts are on landowners who undertake irrigation activities if water table and/or water pressure drops because of the proposed activity.</p> <p><u>Actions:</u></p> <p>Update the Supporting report to include and discuss how adverse impacts to irrigators will be managed, mitigated, or avoided.</p>
13.	<p><u>Issue:</u></p> <p>s4.1 of the Supporting report does not detail the Regional Outcomes and Policies concerning PAAs as detailed in the Darling Downs Regional Plan.</p> <p><u>Actions:</u></p> <p>Update the Supporting report to include and discuss the Regional Outcomes and Policies concerning PAAs as detailed in the Darling Downs Regional Plan with regards to agriculture having the primacy land use.</p>
14.	<p><u>Issue:</u></p> <p>s4.2.2 and Table 4-1 and s4-2 of the Supporting report detail PALUs on lots subject to proposed activity. However, insufficient information is provided on how the non-cropping PALUs were considered. For example, there are areas on Lot 11 SP191489 and Lot 141 AG4261 that might have been used for grazing irrigated modified pastures, but no information is provided on how this was considered, or the methodology, assumptions and data used.</p>

	<p><u>Actions:</u></p> <p>Update the Supporting report to detail how PALUs in classes 3.4, 4.1, 4.2, 4.4, 4.5 and 5.1 were considered e.g. detailed methodology, assumptions and data used, and how it was determined that these PALUs did not occur on land subject to the proposed activities.</p>
15.	<p><u>Issue:</u></p> <p>s4.3 of the Supporting report includes Table 4.1 – Outcome of Identification of PALU on Lots (subject to the application) and associated properties.</p> <p><u>Actions:</u></p> <p>Rename Table 4-1 to ‘Outcome of Identification of PALU on properties (subject to RIDA application)’.</p>
16.	<p><u>Issue:</u></p> <p>Table 4-2 in s4.4.1 of the Supporting report indicates that the proposed area of disturbance of the PAA is 0 ha. This assumes that there will be no permanent impacts to areas of PALU through the impacts of CSG-induced subsidence.</p> <p>The information provided in the application indicates that the risk of impacts to land used for any PALU is being assessed through modelling and baseline monitoring to date. Consequently, appropriate monitoring and management should be established at the property scale for all properties in this application (e.g., via a property scale subsidence management plan (SMP)).</p> <p><i>Note : The RPI Act Statutory Guideline 02/14 Carrying out resource activities in a Priority Agricultural Area at RPI Act - Statutory Guideline 02/14 (windows.net) discusses options for avoiding impacts on the PAA, for example ‘To demonstrate compliance, the applicant may provide an explanation of how the everyday farm practices, or an activity or infrastructure that is essential to the operation of a PALU can continue. For example ... there is no change to the overland flow characteristics where it is relied upon for the PALU’, and the ‘To demonstrate compliance, the applicant may provide information about how the activity on the property does not have a significant impact on the PAA in which it is located. For example: ... evidence detailing how overland flows will be restored to pre-activity capacity in the PAA’.</i></p> <p><u>Actions:</u></p> <ul style="list-style-type: none"> (a) Demonstrate how subsidence impacts will be avoided in accordance with the RPI Statutory Guidelines 02/14. (b) Provide details of how a baseline has been determined and the monitoring techniques used to measure subsidence. (c) Provide the following detailed plans in a stand-alone format: <ul style="list-style-type: none"> (i) a property scale subsidence management plan (SMP) – including plans/actions to monitor/manage CSG-induced subsidence and resulting changes in overland flow (ii) should impacts resulting from CSG-induced subsidence occur, provide a restoration plan where overland flow is impacted by CSG induced subsidence. <p><i>Note: Refer also to Item 25.</i></p>
17.	<p><u>Issue:</u></p> <p>There is an inconsistent use of depths to detail minimum depths of well trajectories. For example, one metre is referenced in s4.4.1 of the Supporting report whereas 189 metres in s4.4.2 and 190 metres in s4.4.3.</p> <p><u>Actions:</u></p>

	Update the Supporting report to detail consistent minimum depths of the well trajectories.
18.	<p><u>Issue:</u></p> <p>s4.4.4 of the Supporting report discusses:</p> <ul style="list-style-type: none"> • Office of Groundwater Impact Assessment's (OGIA) predicted change in slope for land subject to the proposed activity. However, the figures provided in Appendix 8 are too small to thoroughly investigate • Figure 7-5 in OGIA 2021 Underground Water Impact Report (UWIR), but does not provide this figure • that Coffey's subsidence modelling (2021) '<i>indicates that any subsidence that occurs will be relatively widespread and even</i>'. The application, however, excludes those lots that are not subject to the proposed activity but that are likely to be impacted by coal seam gas (CSG) induced subsidence and where voluntary agreements have not been entered into. <p><u>Actions:</u></p> <p>Update the Supporting report to:</p> <ol style="list-style-type: none"> (a) show each of the four maps provided per lot subject to the proposed activity at the A3 scale (b) include Figure 7-5 (c) discuss why land that is likely to experience CSG induced subsidence because of the proposed activity, and where there is no voluntary agreement, has not been addressed.
19.	<p><u>Issue:</u></p> <p>s4.4.5 of the Supporting report does not detail the production and productive capacity of the lots the subject to the proposed activity.</p> <p><u>Actions:</u></p> <p>Update the Supporting report to detail the production and productive capacity of the lots subject to the proposed activity.</p>
20.	<p><u>Issue:</u></p> <p>s4.5 of the Supporting report does not discuss any measures to minimise impacts to PALU associated with the risk to landowners to secure new or refinance existing debt, insurance and other financial products resulting from the undertaking of the proposed activity on their properties.</p> <p><u>Actions:</u></p> <p>Update the Supporting report, specifically in addressing prescribed solution (1)(e) for RO2 and Prescribed Solution (3)(d) for RO1 in Tables 12-1 and 12-2 respectively, to include discussion on the risks for affected landholders to secure and or refinance debt, insurance and other financial services and products and include commitments to provide a management strategy and actions that seeks to avoid, minimise, and mitigate such instances at pre-activity rates, premiums, and excesses, as well as relative terms and conditions.</p>
21.	<p><u>Issue:</u></p> <p>s7.2 of the Supporting report:</p> <ul style="list-style-type: none"> • discusses that a CSG Water Monitoring and Management Plan (WMMP) includes a three-tiered subsidence management framework. However, insufficient information is provided in this section to determine how this approach, including trigger thresholds and management/mitigation actions, may apply to lots subject to the proposed activity.

	<ul style="list-style-type: none"> refers to the amendments to the Stage 1 WMMP and states that ‘<i>additional monitoring method, including bi-annual collection of LiDAR...</i>’ <p><u>Actions:</u></p> <p>(a) Update the Supporting report to discuss the response, should CSG induced subsidence exceed the trigger thresholds.</p> <p>(b) Confirm that the proposed amendments to the WMMP will not have a material impact of the decision-making process associated with the application.</p> <p>(c) Clarify whether bi-annual means twice yearly or every other year.</p>
22.	<p><u>Issue:</u></p> <p>s8 of the Supporting report discusses that the most recent modelling presented in OGIA’s 2021 UWIR indicates that the ‘<i>maximum impact to the Condamine Alluvium as a result of CSG production is expected to be less than 0.3 metres for most of the area...</i>’ This includes discussion on how the Substitution Scheme has been designed to supply water to the area as a mitigation measure to potential impacts to the Condamine Alluvium.</p> <p><u>Actions:</u></p> <p>Update the Supporting report to discuss how offsetting impacts to the Condamine Alluvium by purchasing allocations will not adversely impact the undertaking of current PALU within the affected area.</p> <p><i>Note: If water allocation purchases are progressed, a separate application for a RIDA to manage the expected regional impacts to the PAA maybe required.</i></p>
23.	<p><u>Issue:</u></p> <p>Table 5.1 in s5 of the Supporting report indicates that the proposed area of disturbance of strategic cropping area (SCA) is 0 ha. This assumes that there will be no permanent impacts to areas of strategic cropping land (SCL) through the impacts of CSG-induced subsidence.</p> <p>The information provided in the application indicates that the risk of temporary and permanent impact to SCL is being assessed through modelling and baseline monitoring to date. Consequently, appropriate monitoring and management should be established at the property scale for all properties in this application (e.g. via a property scale subsidence management plan (SMP)).</p> <p>The RPI Act Statutory Guideline 03/14 Carrying out resource activities in the Strategic Cropping Area at RPI Act - Statutory Guideline 03/14 (windows.net) discusses options for avoiding permanent impacts on the mapped SCA and includes that: ‘<i>For land to be restored to pre-activity condition, it will require an adequate restoration to the former or original condition of the land, including the productive capacity of the land.</i></p> <p><i>It does not simply mean ‘revegetated’, ‘rehabilitated’ or ‘reclaimed’ which are all commonly used terms under other state government permit and approval processes.</i></p> <p><i>Restoring the land means that the land is not only returned to its pre-activity use but that it is also returned to its pre-activity productive capacity or potential productive capacity ...</i></p> <p><i>In the context of SCL, the productive capacity refers to the intrinsic capability of the land and soil to store and supply the water and nutrients required to sustain crops in the future’.</i></p> <p>The RPI Act Statutory Guideline 09/14 How to determine if an activity has a permanent impact on Strategic Cropping Land at RPI Act - Statutory Guideline</p>

	<p>09/14 (windows.net) provides guidance on how applicants can demonstrate that a proposed activity does not have a permanent impact on SCL. A restoration plan and a subsidence management plan could also be used to help demonstrate this requirement, e.g. for monitoring and managing temporary impacts, and then restoration at the end of the activity, if required.</p> <p>Independent third-party review by a suitably qualified and experienced person/panel of the property scale subsidence monitoring and management plan is recommended as a further means of ensuring or confirming that there will be no permanent impacts on mapped SCA.</p> <p><u>Actions:</u></p> <p>(a) Demonstrate how permanent impacts will be avoided in accordance with the RPI Statutory Guidelines 03/14 and 09/14.</p> <p>(b) Provide the following detailed plans in a stand-alone format:</p> <ul style="list-style-type: none"> (i) a property scale subsidence management plan (SMP) – including plans/actions to monitor/manage CSG-induced subsidence and resulting changes in soil erosion (ii) should temporary impacts resulting from CSG-induced subsidence occur, provide a restoration plan. <p><i>Note: It is recommended that the SMP is subject to third-party independent review by a suitably qualified and experienced person/panel prior to lodgement. This would need to include an independent review of property specific CSG-induced subsidence triggers.</i></p> <p><i>Supporting information to the SMP that would be useful for identifying the pre-activity condition would include a suitably scaled soil survey – see Queensland Soil and Land Resource Survey Information Guideline (Department of Resources 2020) and RPI Act Statutory Guideline 08/14 How to demonstrate that land in the strategic cropping area does not meet the criteria for strategic cropping land Document title (windows.net) for further guidance.</i></p>
24.	<p><u>Issue:</u></p> <p>The CSG-induced subsidence management discussions in the Supporting report (s7.4) are not tailored to the specific properties within this application, nor reflected in a stand-alone subsidence management plan. While some of this detail required may be found in separate documentation (e.g., the WMMP), these should be specifically adapted for subsidence monitoring and management purposes at the property scale – for the properties associated with this application.</p> <p>There is a concern that the Tier one screening referred to on page 99 using a 1km x 1km grid is insufficiently scaled to identify changes in slope and ponding (of more than 8mm per year) at the property scale. Specific exceedance triggers requiring action (at the property scale) for the properties within this application have not been included.</p> <p>Analysis of ground movement was completed using a Sentinel InSAR dataset. Due to the limitations (e.g., vertical accuracy) of InSAR, the conclusions regarding the differences in elevation that have been observed since 2015 are difficult to substantiate. For example, it is unclear how InSAR can be used to accurately report on ground movement in ‘mm’ to form a baseline for a property scale monitoring program.</p> <p>It is conceded that the movement of shrink/swell soils is cyclical and will be different during periods of drought or high rainfall, which makes it extremely difficult to establish a baseline elevation. Cultivation adds another complexity, as does the specifics of the cropping system. Even airborne LiDAR with a vertical accuracy of ± 50 mm may not be sufficiently accurate to detect critical changes in slope or depressions resulting from ponding that may temporarily and/or permanently impact</p>

the SCA and farming operations at the property scale – particularly in landscapes of very low relief.

Property scale monitoring of CSG-induced subsidence may require more accurate technology (e.g. RTK Drone LiDAR) to establish a baseline and monitor against this baseline for the properties associated with this application.

There is no analysis of the DEM provided in Appendix 6. For example, there are no Figures demonstrating change in slope over 2012, 2014 and 2020 at the property scale. There has been no discussion of climatic variables which may explain changes in elevation due to changes in soil moisture.

Actions:

All issues described below should be addressed in a Subsidence Management Plan at the property scale, for the specific properties associated with this application and include details relating to proposed monitoring, appropriate exceedance action triggers if CSG-induced subsidence is detected at the property scale, reporting, and appropriate actions for management if CSG-induced subsidence is detected at the property scale:

- (a) provide the vertical accuracy of the Sentinel InSAR data and discuss any post capture processing required to achieve that vertical accuracy
- (b) confirm the metadata for the Sentinel InSAR and whether it was collected to Australian Standards
- (c) provide detailed metadata of the LiDAR DEMs.
Note: the metadata for all the LiDAR generated Digital Elevation Models must be collected to the relevant Australian Standard [\(link\)](#).
- (d) confirm the difference in accuracy and precision between the LiDAR and InSAR
- (e) clarify whether all LiDAR monitoring has been aligned to permanent survey markers of a known and recorded location (e.g., the network of geodetic permanent survey markers, and based on a common geodetic datum – e.g., GDA2020). All current and future surveys should reference these permanent survey markers to ensure accurate comparisons can be made between surveys.
- (f) conduct spatial analysis to compare change of elevation and slope between different years of LiDAR capture (Example DEM of difference). Surveys should be captured at the same time of the year to minimise seasonal differences due to soil moisture variability. Any changes in soil moisture (e.g., drought or unseasonally high rainfall) should be accounted for in the analysis
- (g) confirm with a suitably qualified and experienced agronomist, the exceedance triggers where critical changes in slope or the development of depressions result in ponding that may 1. temporarily and 2. permanently impact the SCA and farming operations at the property scale – this may be different for each property.
- (h) once the critical changes in slope or depressions that may result in ponding (exceedance triggers) have been identified, investigate using suitably accurate monitoring measurement techniques (e.g., RTK Drone LiDAR) to accurately identify the baseline DEM, monitor against the triggers, and focus any management to ensure there is no permanent impact.

Note: Department of Agriculture and Fisheries may need to be consulted to confirm the critical changes in slope and depressions resulting in ponding at the property scale (i.e., exceedance triggers). These will need to be unique to the cropping systems in the application area. These should also be verified by an independent third-party.

Changes in slope of approximately 25 mm per kilometre as derived from Sentinel InSAR are unlikely to reflect subsidence at the property scale. Any triggers should be based on the

	<i>properties applicable to this application – even minor changes to slope in self- mulching, black Vertosol soils can significantly increase the erosion risk.</i>
25.	<p><u>Issue:</u></p> <p>Impacts on SCL due to salinity associated with any irrigation from treated CSG water has not been addressed or acknowledged. If irrigation is to occur using treated CSG water from wells on these properties, a salinity risk assessment may be required. This may require further discussion with Department of Resources Land Resource Officers.</p> <p><u>Actions:</u></p> <p>Consider consulting with Department of Resources Land Resource Officers in relation to developing a salinity risk assessment where treated CSG water may be used for irrigation (if applicable).</p>
26.	<p><u>Issue:</u></p> <p>The figures provided in Appendix 3 of the Supporting report do not clearly identify the Australian Land Use Mapping (ALUM) classes of PALUs detailed in the Darling Downs Regional Plan.</p> <p><u>Actions:</u></p> <p>Update the figures including legends to clear identify the ALUM Classes of PALUs detailed in the Darling Downs Regional Plan.</p>
27.	<p><u>Issue:</u></p> <p>The figures provided in Appendix 4 of the Supporting report do not clearly identify the ALUM classes of PALUs detailed in the Darling Downs Regional Plan.</p> <p><u>Actions:</u></p> <p>Update the figures including legends to clear identify the ALUM Classes of PALUs detailed in the Darling Downs Regional Plan.</p>
28.	<p><u>Issue:</u></p> <p>Appendix K, containing details on asset specific thresholds and investigation methods of subsidence, is referenced in Appendix 9 but is not provided as an attachment to the Supporting report.</p> <p><u>Actions:</u></p> <p>Provide Appendix K.</p>