

MEETING MINUTES



MINUTES OF: Arrow Surat Community Reference Group
 HELD AT: Gips Restaurant, Toowoomba
 DATE: 2 December 2015
 COMMENCEMENT TIME: 9.10am

Present:	<p>Leisa Elder – Vice President External Relations and Tenure Management Carey Bradford – ATP Compliance Manager Simon Gossmann - Groundwater Manager Peta Tucker – Community Relations Manager Tania Marshall – A/Senior Community Officer, Dalby</p> <p>John Hughes- Project Officer CSG Compliance Unit; DNRM Graham Clapham – Central Downs Irrigators Ltd Ian Hayllor – Landholder Sarah Due – Regional Manager, Agforce Cr Nancy Somerfield - Councillor, Toowoomba Regional Council</p> <p>Presenters: Jamie Robertson – Water Infrastructure Lead</p> <p>Guest from Arrow Intensively Farmed Land Committee Wayne Newton – Landholder</p>
	<p>MINUTES: Tania Marshall - Secretariat</p>
	<p>Apologies:</p> <p>Cr Charlene Hall - Councillor, Western Downs Regional Council Jordan Peach – Australian Lot Feeders Association, Mort & Co Matt Paull – Policy Director, APPEA Cr Ray Jamieson – Councillor, Western Downs Regional Council Mary O'Brien – Regional Manager, Cotton Australia Lyn Nicholson – Chair, Basin Sustainability Alliance Trudi Bartlett – Member Services Manager, Dalby Chamber of Commerce Pat Weir MP – Member for Condamine Geoff Hewitt – Landholder</p>
CHAIR:	Leisa Elder , Vice President External Relations and Tenure Management
DISCLOSURES	None recorded

		ACTION/SUGGESTIONS
ITEM 1	<p>Welcome – Leisa Elder</p> <ul style="list-style-type: none"> Leisa Elder advised that Arrow had undertaken a redundancy program the week prior. 150 positions were made redundant in the current economic climate. She did advise the Bowen Basin FEED would continue and be completed by the end of December. At this time, work was proceeding to de-risk some complex drilling matters. The \$250M Daandine Expansion Project is progressing in the Surat with expected completion by the end of December. Arrow may look at bringing the Surat development plan forward. <ul style="list-style-type: none"> Graham Clapham asked if the reduction in staff had anything to do with the Shell BG combination. Leisa Elder advised that changes within Arrows workforce was not related. Leisa Elder advised discussions regarding Arrow are a matter for Shell and CNPC as Arrow is a standalone company owned by a joint venture between Shell and PetroChina. The acquisition of BG and QGC was a matter for Shell. Graham Clapham noted that Shell has been quoted in the media that the takeover of QGC is about expanding Arrow's access to gas. 	
ITEM 2	Safety moment – Snake Awareness – Peta Tucker	

<p>ITEM 3</p>	<p>Research and Innovation – Erosion and Rehabilitation Trials</p>	
	<ul style="list-style-type: none"> • Background to trials – development of new infrastructure will cause soil disturbance which will need to be stabilised and rehabilitated to meet Environmental Authority conditions. • The erosion and rehabilitation trial aimed to identify which treatment types are more successful in terms of affecting grass growth and enhancing protection against erosion. • Trial undertaken on Arrow’s research and demonstration farm, Theten. • The performance of erosion and sediment control methods in establishing long-term vegetative cover on disturbed soil was assessed using combinations of two soil stabiliser products, seed mixes and fertiliser. • The goal was to provide a proven menu of options around erosion and sediment control techniques that can be rolled out as required for operational and rehabilitation works. • Erosion performance was assessed using simulated rainfall followed by ecological examinations of rehabilitation potential. • Findings – <ul style="list-style-type: none"> ○ All products demonstrated successful reduction of soil erosion and after 12 months all areas are well remediated. ○ Products with fertiliser grew vegetation much faster than those without. ○ Good performance noted on fertilised plots with soil stabiliser Vital Bon-Matt Stonewall and native & exotic seed mixtures. ○ Another soil stabiliser relied heavily on adequate water supply in the early period. • Ian Hayllor asked if the plot was fenced to prevent native animals impacting the trial. • Peta Tucker advised the plot was not fenced. • Graham Clapham asked if weeds were measured prior to the trial. • Carey Bradford advised that early rains mean early germination of grasses. Some sites take 2-3 years to get adequate vegetation cover and some just a couple of months, depending on the timing of the rainfall. Early monitoring of weeds allows for effective and timely treatment of weeds. • Nancy Sommerfield asked if surrounding areas were reviewed for weeds. • Carey Bradford advised that areas around works and roads are monitored. • Sarah Due asked if Arrow get surrounding landholders involved in a large scale weed management plan as this works well from an area plan perspective. • Carey Bradford advised he would take that on board. • Ian Hayllor advised he had recently reviewed the pipeline near Biloela and there was a lot of Mexican Poppy across the landscape and farmers land. Weed management must be a team effort. Early baseline data is important. • Nancy Sommerfield advised that it makes landholders responsible for their own properties. • Sarah Due stated that the program gets Councils and natural resource management groups involved. • Carey Bradford advised that for all site works undertaken Arrow has an ecologist review the site. • Ian Hayllor asked if farmers are involved with ecological assessments of site and do they sign off on the assessments. Ian also noted that it would be good practice to have the landholder aware from an early stage. • Carey Bradford advised that not to date, however Arrow would consider this. • Wayne Newton advised that weeds on properties maybe dormant in the soil, but as soon as the ground is disturbed they become active. 	
<p>ITEM 4</p>	<p>Arrow’s Dam Integrity Jamie Robertson, Arrow Energy Water Infrastructure Lead provided an overview of Arrow’s dam management program.</p> <ul style="list-style-type: none"> • Arrow has 14 dams in the Surat region with ~21km of dam walls. Low height homogenous earth dams ranging in height from 1m to 6m. • Land rehabilitation program – 3 dams were rehabilitated in 2014-2015 which included 1.3km of dam walls with a footprint of 6.41ha. • Maintenance works – currently maintaining 3.5km of walls in 2015. Works are prioritised by third party dam engineers. It is significantly cheaper to maintain dams than to complete major repairs following sustained periods of no maintenance. • Arrow has undertaken various dam building campaigns in accordance with field development and functional requirements of dams (storage for aggregation, of treated water (for beneficial reuse) and brine). • Dams go through a rigorous design process and take between 1-2 years to construct. One key issue is the avoidance in design of pipelines through walls. Arrow also caps dams with 150-300mm of gravel as a suction breaker (preventing embankment moisture loss and shrinkage cracks) and also a wearing course. • Inspection process is undertaken weekly, monthly and annually. Weekly 	

	<p>water levels are monitored. Each month a walk around each of the dams is undertaken which takes approximately 30-60minutes and looks at the embankment, spillway and the HDPE liner.</p> <ul style="list-style-type: none"> • Signs of problems with the dam integrity vary and include the presence of wet areas downstream of dam/water plants signs of seepage as well as cracks on the surface and slumps in the surface of the dam. • Maintenance primarily includes vegetation reestablishment and ground conditioning, maintenance of gravel capping; rectification of poor drainage issues, damage caused from wet weather and HDPE liner repairs. • Various methods of vegetation performance were used and are continually being reviewed for effectiveness. • Graham Clapham stated that he is the owner of 6 dams and maintenance of vegetation is required. Graham ploughs the top of his dams and keeps vegetation on the slopes. • Ian Hayllor commented that the presentation provided was very good and that the irrigators could learn from such a maintenance program. Ian suggested the presentation be given to the next irrigators meeting. Currently their education program does not include a dam maintenance module and asked if Arrow could share their program. • Jamie Robertson advised that Arrow's dams must be available at all times to take water when water treatment plants are being maintained or have unexpected downtime. Dams are sized and managed to be able to manage large wet seasons. • Graham Clapham endorsed the comments on not having pipes through embankments. He stated it was only a matter of time before dams fail when pipes are through. • Jamie Robertson advised they do constantly have suction problems with pumps as a result of having pipelines go over walls rather than through wall, but it was more easily managed than dam failures. • Graham Clapham stated there had been loss of life through dam failures. 	<p>Ian Hayllor to advise of meeting date.</p>
<p>ITEM 5</p>	<p>Membership – Leisa Elder</p> <ul style="list-style-type: none"> • Geoff Hewitt had tendered his resignation from the committee. • Sarah Due asked if Geoff Hewitt was a representative of a group. Leisa Elder advised initially he was and then became a landholder representative. Graham Clapham respected Geoff Hewitt's decision to resign; he commented that he was a well-respected landholder with in the community. • Lyn Nicholson has also tendered her resignation as she is now no longer the BSA Chair. An invitation will be send to the new BSA Chair for him to join the committee. 	<p>Letter of invitation to be sent to new BSA Chair</p>
<p>ITEM 6</p>	<p>Minutes of previous meetings & actions – Leisa Elder</p> <ul style="list-style-type: none"> • Minutes of previous meeting were approved by the committee. • Action – Request to provide DNRM with Arrow's Coexistence Simultaneous Operations Matrix forwarded to Government Relations Unit. • Flaring – Arrow provided local landholders with information on the field flaring activities undertaken. There were no issues that arose surrounding this. No enquiries or complaints were recorded through either Arrow's 1800 phone number or the Info@Arrow email. • Leisa Elder advised that there had been no issues during the plug and abandon works in the Scenic Rim. Local groups were consulted with prior to the works and tours of sites were provided. • Seismic Survey – John Hughes from DNRM advised he has not spoken to Michael Todd (Arrow Energy's Government Relations Manager) regarding these surveys. Peta Tucker advised John Hughes that an engagement plan had been developed. John Hughes said he would follow up with Michael Todd. 	<p>TM to arrange for minutes of the September meeting to be uploaded to the website.</p>
<p>ITEM 7</p>	<p>Pest Management – Peta Tucker</p> <ul style="list-style-type: none"> ○ Arrow currently participates in the Western Downs Regional Council's baiting program on selected Arrow owned properties. ○ A contractor had been engaged to undertake pest management activities in 2016. Proposed management techniques may include: <ul style="list-style-type: none"> ○ Feral pigs: <ul style="list-style-type: none"> ▪ Grain baiting ▪ Trapping ○ Wild dogs, foxes and cats: <ul style="list-style-type: none"> ▪ Baiting (participate in council program) ▪ Trapping ○ Kangaroos: <ul style="list-style-type: none"> ▪ Population monitoring • Sarah Due noted that a program will only be beneficial if surrounding landholders become engaged in an area wide program. There are already many successful models in place. 	

<p>ITEM 8</p>	<p>Update from Arrow's Intensively Farmed Land Committee – Simon Gossmann Regional Planning-</p> <ul style="list-style-type: none"> • Under the Regional Planning Interests Act 2014 – • For current work, Arrow has not had to negotiate the Regional Planning Act yet relying on: <ul style="list-style-type: none"> ○ s.24 exemption (existing approvals in place as at 12 June 2014) ○ s.22 (agreement with landholders) ○ s.99 (pre-January 2012 approvals) • For new development Arrow will – <ul style="list-style-type: none"> ○ Focus on reaching agreement with landholders (as was the intent of the legislation) to qualify for the s.22 exemption ○ Up front planning and agreements (through AWO) with landholders to allow certainty. • Arrow remains concerned by some aspect of the Act – <ul style="list-style-type: none"> ○ Ambiguity across the resource sector regarding the application of exemptions ○ Concerns with breadth of appeals – <ul style="list-style-type: none"> • Open to 'affected landholders' who can appeal what has been agreed between landholders and companies – this could mean third party appeals from anybody on the Condamine Alluvium or associated water courses. ○ Siting of infrastructure agreed by landholder and company could be overridden by the imposition of RIDA conditions. ○ The current State Government may decide to alter aspects of the Act especially SCL. • Ian Hayllor stated landholders should have the right to say where placement of infrastructure is made. 	<p>Further explanation of s.99 required to be distributed out of session. Further work is being undertaken. A representative of Government Relations to present at next committee meeting.</p>
<p>ITEM 9</p>	<p>Surat Groundwater Monitoring Update – Simon Gossmann Baseline Assessment in a Priority Living Area-</p> <ul style="list-style-type: none"> • As part of the baseline assessments in a priority living area Arrow will undertake an assessment program in Dalby in 2016. There are 185 known bores with 180 owners. The proposed steps to be undertaken in this program are: <ul style="list-style-type: none"> ○ Send letter of introduction inviting the bore owner to participate in the assessment process. ○ Send notices to respondents ○ Coordinate timing of assessments ○ Complete assessments ○ Send reports to bore owner and OGIA • It is a legislative requirement to send landholders a notice of entry. • Third party assessments will be undertaken with all equipment supplied to the contractor by Arrow Energy. • To date arrow have undertaken 950 baseline bore assessments. • Graham Clapham said to ensure that all communications fully explained the process. • Ian Hayllor suggested a story be run in the Dalby Herald with quotes from himself and Mayor Ray Brown. Ian stated it was in a bore owner's best interest to have the bore monitored. • Letters to landholders will be sent out asking landholders if they wish to participate. • Wayne Newton questioned how many non-registered bores existed. There were a lot of large subdivisions where town water was not supplied. Simon Gossmann advised that initially they thought there may be 10% not registered however now thought it to be not that high, however it is difficult to determine. • Graham Clapham stated it was in the owner's best interest to have the bores registered. • Nancy Sommerfield stated that it was a legal obligation to register a bore. • Simon Gossmann advised that engagement is to commence in 2016 and likely to start mid-year. 	<p>Request forwarded to Government Relations Team.</p>
<p>ITEM 10</p>	<p>Any Other Business</p>	
	<p>Lonepine & Daleglade monitoring is ongoing –</p> <ul style="list-style-type: none"> • Graham Clapham would like access to the data. • Ian Hayllor advised that the antenna on the Daleglade site may need checking. <p>• Ian Hayllor advised another research trial by UQ had been undertaken. OGIA data had also been used. The outcome would be more accurate siting of gas wells. He hoped that more research could take place.</p> <p>OGIA Report - Simon Gossmann advised that OGIA are finalising their report for release in early 2016.</p> <p>Uncapped/uncased wells</p> <ul style="list-style-type: none"> • Graham Clapham advised that Bryce Kelly was looking at uncapped / uncased wells. • Carey Bradford advised that QRC and APPEA had reviewed this also. 	<p>Simon Gossmann to provide data to Graham Clapham once completed.</p> <p>Graham Clapham to provide information on</p>

	<ul style="list-style-type: none"> • Issue of record keeping in 1960 & 1970s – data was problematic • Mid 1980's data was a little better • Mid 1990's a code of practice was developed • Arrow has access to Peabody data around the Wilkie Creek. • Coal records are only open after tenure is given up. • Gas companies must release data 3-5 years after drilling. • GISERA has monitoring towers to monitor methane flux. • The Picaro study did pick up some old bores. • Graham Clapham spoke about legacy bore holes. Bryce Kelly has developed a model stating there were 130000 potential sites. A report was presented to DNRM, however not published. Graham Clapham to forward information to Arrow. 	<p>Bryce Kelly's report.</p> <p>Simon Gossmann to also follow up through OGIA</p>
<p>ITEM 11</p>	<p>Agreed Outcomes, Actions and Deliverables – Nil additional</p>	
<p>ITEM 12</p>	<p>Next meeting Committee participation in 2015 – Leisa Elder thanked the committee for their participation in 2015.</p> <p>Dates for 2016 meetings – to be circulated with the first meeting to be end of February. Graham Clapham offered to host the February meeting.</p> <p>First meeting to provide a background of the Bowen Basin activities.</p>	<p>TM to circulate dates and confirm with Graham Clapham</p>

There being no further business, the meeting was closed at 11.10am.

CONFIRMED AS A TRUE AND CORRECT RECORD.

Chairperson