

Nathan Dam and Pipelines Project EIS
 Community Liaison Group
 Minutes of meeting



Meeting number: 4
Date: Thursday 24 June 2010
Time: 10am - 1pm

| | |
|-----------|--|
| Present | Cr Vaughn Becker Taroom District Development Association Ms Cecily Brockhurst – Banana Shire Council Mr Adam Clarke – Wildlife Preservation Society of Queensland (Upper Dawson Branch) Mrs Jeanie Conachan – Fitzroy Basin Food and Fibre Mrs Kathy Liddle & Mark Liddle – Landholder Jane Holdsworth – Dalby Regional Council Sam Jeffered – Taroom Lions Club Ms Kellie Nilsson – Dawson Catchment Coordinating Committee Mr Ian Herbert – Capricornia Conservation Council Mr Warren Phelps – Taroom Lions Club Sam Rathbone – Landholder (Pipeline) Mr Richard Moffat – Wildlife Preservation Society Mr Peter MacTaggart – SunWater Samantha Watt – SKM Michelle Watson – SKM Pauline Bourke – Terrace Communications Cr Ian Stevens - Western Downs Regional Council Cr Mick Cosgrove - Western Downs Regional Council |
| Apologies | Greg Polkinghorne (DIP) Rob Hutchinson (Dawson Valley Development Association) Max Henderson (Dalby Regional Council) |

| Agenda Item | Discussion | Action/due date |
|---------------------------|--|-----------------|
| Welcome and introductions | <p>Pauline Bourke (PB) welcomed everyone</p> <p>Members introduced themselves</p> <p>PB gave apologies for Greg Polkinghorne and explained that he is the new DIP case manager for the Project</p> <p>PB introduced agenda, explained changes to agenda</p> <p>Peter MacTaggart (PM) gave a presentation (slides attached)</p> <p>Boggomoss Snail</p> <p><i>2008:</i></p> <p>Surveys done by John Stanasic (JS)/SKM</p> <p>Knew if dam went ahead ~50% of snails inundated</p> <p>Federal Department of Environment, Water, Heritage and the Arts (DEWHA) said snails need to be moved and shown to be viable (3 years trial)</p> <p>Suspended EIS process pending translocation trial</p> <p><i>2009:</i></p> <p>More snails found by JS</p> <p>2 more surveys by SKM</p> <p>Snail population estimate updated from 850 to 17,500</p> <p>DEWHA agreed EIS process could continue without translocation trial</p> <p>SunWater board decided to recommence project</p> <p>Still need to mitigate impacts on snail. Will be more work done on snail.</p> <p><i>Survey Information:</i></p> <p>Survey 1 – distributional survey</p> <p>Survey 2 – population estimate</p> <p>Habitat:</p> | |

| | | |
|--|---|---|
| | <p>Generally <50m from Dawson River</p> <p>Below Carnarvon Palms in deep leaf litter</p> <p>Some under <i>e. tereticornis</i> (Blue Gum / Forest Red Gum) (2 names)</p> <p>None found above Mt Rose, Although found on 1 tributary</p> <p><i>Questions</i></p> <p>IH - JS is snail expert. Has he verified results? PM – JS has confirmed identification from photos</p> <p>IH - Has SKM published results from snail surveys? PM – SKM has prepared an interim report. This has been provided to DEWHA. SKM will publish survey results when EIS is published</p> <p>SJ – Which is Carnarvon Palm? PM – Livingstonia (local palm)</p> <p>KL - would the snails that you have found in recent survey be affected by dam development PM - no not inundated by dam</p> <p>Dam Design</p> <p>Originally looking at gated structure for dam and were planning for 1 million megalitres, 185 m AHM. However issues in terms of uplift pressures, bore levels, flooding etc. Now looking at an earth embankment dam which SunWater believes will be a more viable option(earth fill with clay liner and core). Now looking at 183.5 m AHD, however it will require a spillway on the right bank. Currently investigating sand lenses (bad for earth embankments). Data so far looks okay.</p> <p>Have modelled based on PMF (probable maximum flood) and the dam crest will need to be about 17 meters above full supply level and the spillway will be approximately 200-300 meters wide.</p> <p><i>Questions on Dam Design</i></p> <p>VB - can materials for an earth dam be easily accessed locally? PM - the rock can be however the clay is not as easy to source. Will need to get elsewhere.</p> <p>SR - Have you talked to Surat Basin Rail, they may have excess fill to get rid of PM - no but we can.</p> <p>SJ - Are you looking to use sandstone and if so wouldn't granite be better?</p> | <p>PM to speak to SBR re: possible source of fill</p> |
|--|---|---|

| | | |
|--|--|---|
| | <p>PM - sandstone might be ok for the downstream face, but yes we would use granite where required.</p> <p>Questions on Flooding</p> <p>IH - What is AEP of PMF? PM – big, probably about 1 million</p> <p>IH Comment – Previous cyclone (Joy) produced a flow of 15,000 m3/s @ Rocky</p> <p>Road Upgrades</p> <p>PM presented a map including overview of roads to be upgraded and roads not to be upgraded.</p> <p><i>Road Upgrade Questions</i></p> <p>VB – Requested copy of slides</p> <p>MC – will there be access from south? PM – Nathan Road will be upgraded (not currently marked on map)</p> <p>JC - Will there be an access track along pipeline PM - yes</p> <p>SR – Can you work with Surat Basin Rail on upgrades? PM - possibly</p> <p>SJ - Precipice sandstones are a source of GW for locals. What does modelling show on impacts? Believes infiltration area is located ~3km D/S of damsite.</p> <p>PM – Groundwater modelling is being done at the moment. Information will be presented at next meeting once this has been completed.</p> <p>Recreational Areas</p> <p>Recreation Areas are up for discussion SunWater will construct if Council will maintain</p> <ul style="list-style-type: none"> ▪ Proposed viewing platform at dam site ▪ 2 rec areas – 1 off Nathan Rd, 1 off Taroom side <p><i>Recreational Area Questions</i></p> | <p>PM will get accurate estimate of AEP of PMP (rainfall)</p> <p>Copy of presentations to be distributed with minutes</p> <p>PM will revise road upgrade map and provide</p> <p>Groundwater modelling to be presented at CLG#5.</p> |
|--|--|---|

| | | |
|--|--|--|
| | <p>JC comment – Irrigators don't want to pay for public amenities</p> <p>IS – How do you get there from Wandoan to put in a boat</p> <p>PM – Can't put a boat in at dam (viewing platform). Will need to come in from Cracow Road</p> <p><i>More Flooding Questions</i></p> <p>PM - There is some flood mitigation at Theodore but it is less than the previous design with spillway gates</p> <p>IH –Will spillway still have gates?</p> <p>PM – No. Outlet works will be very big.</p> <p>AC – Will there be a multi-level offtake?</p> <p>PM - Yes</p> <p>JC – Flooding shown at Theodore (in presentation) is greater than the recent flood event at Theodore, which was a coincident record event in 2 main tributaries.</p> <p>IH – Comment – Fairbairn Dam outlet was not big enough for post- winter flows</p> <p>PM – it was augmented to meet environmental flow requirements enforced by the WRP</p> <p>PM – Water Resource Plan (WRP) has an Environmental Flow Objective (EFO) relating to flood statistics. The outlet needs to be very large to release flows to meet this requirement</p> <p>JC – (on WRP Panel) – WRP Panel is reviewing EFOs. Don't know if they are changing or not.</p> <p>AC – EFOs are not as good as cracked up to be. Mainly for fish breeding. However, flows are not the only factor. Temperature / composition / antecedent conditions often doesn't facilitate fish breeding even when flows are provided. However, better than nothing.</p> <p>PM – Feds don't care about EFOs, will need to justify downstream flow regime on a scientific / environmental basis as well for them</p> <p>VB – How will fish passage be done? Where will it be?</p> <p>PM – Upstream passage will probably be a lift on Downstream Face. Noted that they have learnt a lot of lessons from Paradise. There is still a lot of work to be done. Will bring more info next time.</p> <p>VB – Noted that there were very good results at recent local fishing competition</p> <p>AC – Noted that this was because the weir was only a ripple, therefore this is evidence of weir causing blockage to fish</p> | <p>Update on Fish Passage Design to be presented at CLG#5.</p> |
|--|--|--|

| | | |
|--|---|--|
| | <p>VB – Noted that recreational fishing is a big deal on Dawson River. Lots of festivals for fishing</p> <p>JC – Fishing is very important for tourism</p> <p>PM – Noted that he won't have a final design of Fish Transfer at EIS stage. Will have a concept as DPIF don't like it finalised as they prefer to have input at later stages of design.</p> <p>SJ – Where fault goes across at Cockatoo Creek, have you done any modelling of consequences of dam on this part of groundwater (not the Precipice Sandstones, Thinks this is the Hutton?? Sandstone)</p> <p>Pipeline Route</p> <p>Glebe pipeline is proposed in road reserve. Two pipelines, therefore won't fit in road reserved, therefore Nathan Pipeline will be in private property</p> <p>SB – Why not 1 pipeline?</p> <p>PM - Timing. Xstrata want pipeline in 2013. Won't know if proceeding with dam at that point. If we know ND outcome prior to Xstrata requiring water, would build only 1 pipeline.</p> <p>SB – The mine will happen. It is only a matter of time. Why don't we have forethought to build it anyway?</p> <p>PM – Cost. Someone has to pay for the pipeline. Someone has to take the capacity risk, and there are problems with running oversized pipes (pumping costs). SunWater needs a customer who is willing to pay. Need to plan now for 2 pipelines</p> <p>CB– Didn't pipeline go to Miles?</p> <p>PM – It did previously. Not now. Tried co-location on highway. DTMR won't let them in road reserve. 20 km less pipe saves \$50 million. Only 1 customer (Miles town) along that route and there are opportunities for Miles Town to get water direct from CSG operations in that area</p> <p>IS – Do you think people will be easier / more okay with water pipeline versus gas pipeline?</p> <p>PM – we are going to offer water and so far people have been okay. Can crop on top, minimal limitations on use</p> <p>SR – QLD Government originally said State Development Area was to co-locate all infrastructure. But have confirmed that corridor is for rail only.</p> <p>VB – Is water available all the way down pipeline? Could get more industry to region if had more water</p> <p>PM – Yes. The project is about water supply security for the region, and this includes towns. SunWater will</p> | <p>PM will bring a Groundwater person to CLG#5</p> |
|--|---|--|

| | | |
|--|---|---|
| | <p>be using data from studies that have been undertaken by CQLGA and others regarding projected water requirements as inputs to our demand surveys, and these numbers will be discussed with both of the Councils.</p> <p>IS – Original issue was that irrigators couldn't pay for water</p> <p>PM – Now mines can pay, so infrastructure can be built. Demand survey shows irrigation and town demands as well as mine. Not discussing pricing as yet. But water will be available for towns</p> <p>JC – There is a current WRP issue, as you can't currently convert Medium Priority (MP) (generally irrigation) entitlements to High Priority (HP) entitlements (generally required by towns). So towns can't buy irrigation water. When sorted in new WPP, believes there will be water available for purchase.</p> <p>SJ – How much water will you get out of storage?</p> <p>PM – This will depend on product type. If mines and towns (HP) 70,000ML. If irrigation (MP), maybe more. But may need to compensate some water harvesters</p> <p>AC – How much water is going down pipeline?</p> <p>PM – approximately 50,000 ML, however depends on demand. Off-takes along the way</p> <p>Cultural Heritage</p> <p>KL – Had a phone call from an Iman woman wanting to know about general project. Can they be part of CLG?</p> <p>PM gave presentation on Cultural Heritage</p> <ul style="list-style-type: none"> ■ Map showing claim areas ■ Bundalla (burial area) is a major issue (on Liddles' property). ■ Should have CHMP by end of year ■ Start ILUA process (native title) after that <p>Discussion of Surat Dawson Integrated Project & CSG (coal seam gas)</p> <ul style="list-style-type: none"> ■ 3 current CSG EIS's are in the public domain – Santos, Origin and QGC. ■ Department of Employment, Economic Development and Innovation (DEEDI) water forecast – 200 GL/year (200,000,000,000 L) ■ CSG producers want to sell, but can't guarantee long term ■ CSG producers want a Take and Pay arrangement (issue for mines, as may need to stop taking for some | <p>PM will contact Iman to discuss participation.</p> |
|--|---|---|

| | | |
|--|--|--|
| | <p>reason)</p> <ul style="list-style-type: none"> ■ Short term, Can send to Condamine at Chinchilla ■ Longterm Nathan could supply CSG water to users through pipeline <p>AC – what about Santos?</p> <p>PM – too far away, maybe minor amounts to go into Dawson. Question for Santos</p> <p>MC – Aren't there issues with putting it in River?</p> <p>PM – This is an issue for gas companies. SunWater is a water company, can take their water.</p> <p>AC – Not happy with Santos putting water into Dawson</p> <p>SJ – What are you going to do with salt going into Nathan?</p> <p>PM – Hadn't considered, expecting that regulator will regulate</p> <p>AC – Salt in Santos EIS is all motherhood statements, no one doing anything. Water will change regime for fish but if salt is put into river, it will ruin it. Cumulative impact is horrifying.</p> <p>JC – Not a unique problem. Lots of CSG development in Isaac, Connors. Trials (Miles) putting it back down deep wells. Department is still doing research</p> <p>JJ – Col Hazel (GW expert) gave GAB talk at Dalby. Believes that it is all one bucket (rock is permeable). Thinks that GAB will be gone within 50 years. Main worry is impact on GQAL. Calculations say lots of water, lots of salt. Little been said on water going down rivers. How do we know that salt won't leach out.</p> <p>AC – If Santos get their EIS approved? Is this an issue for SunWater?</p> <p>PM – need to think about the issue. But let's use the water.</p> <p>PM noted that SunWater has no control over CSG impacts but can use the water. PM presented a comparison of CSG supply and surveyed demand timeframes, indicating when the dam might be constructed.</p> <p>IS – Will it take 3 years for construction of dam or construction and filling? PM – construction. Will do filling analysis. But won't need full demand straight off as CSG supply will tail off not sudden drop. Provided target timeframes.</p> <p>RM – How much water will the dam commandeer from irrigators? ie. Stopping farmers building farm dams. Can it turn off existing users?</p> <p>PM – No it can't. Existing allocation holders have their entitlements protected under the WRP. Farm dams are a matter for DERM</p> | |
|--|--|--|

| | | |
|-------------------------|--|---|
| | <p>JC – What do Mines use water for?</p> <p>PM – coal handling preparation plants , dust suppression</p> <p>ML – They spent 30 million dollars first time in 1996. Now all work is being done again as legislation has changed. If you put off the dam, will it all have to be done again?</p> <p>PM – There will be some rework, but EIS approval lasts for 4 years and can be extended for an indefinite period beyond that. CHMP has no time limit.</p> <p>Post meeting note: this point has been clarified and EIS approval lasts for 4 years and can be extended at the discretion of the Coordinator-General.</p> <p>KL – Main issue is what does she tell her kids? Uncertainty is biggest issue for affected landholders.</p> <p>VB – Is Glebe still on?</p> <p>PM – Xstrata want CSG deal but too uncertain, so Glebe still on</p> <p>SJ – Are you still putting a bag (fabridam) on Glebe?</p> <p>PM – waiting for outcome of coroner’s court on Bedford Weir accident. No bag until outcome of case, then develop policy. Can use steel gates instead if required.</p> | <p>PM to visit Liddle family to discuss issues in person.</p> |
| <p>SKM presentation</p> | <p>PB introduced SKM</p> <p>MW provided an overview of work done previously, work SKM has done to date and timelines for future work. (Slides attached)</p> <p><i>EIS Questions</i></p> <p>AC – what is EFOS / WASOS</p> <p>PM – Environmental Flow Objectives, Water Allocation Security Objectives (statistics used to measure performance under WRP)</p> <p>SJ – Question on fauna. How detailed was flora survey?</p> <p>MW –Flora Survey being undertaken now. Snail survey to be undertaken next week.</p> <p><i>Topics For CLG#5</i></p> <p>MW noted that SKM will attend CLG#5 in mid-late September to discuss impacts and draft mitigation measures proposed before chapters are locked down. Asked for input on what topics CLG Members wanted</p> | |

| | | |
|--|---|--|
| | <p>to hear about at that meeting.</p> <p>Discussion on Topics</p> <p>PB – Previous commitment for NS to contact Cecily re: Social Impact Assessment</p> <p>JC – Old WRP, moving goal posts</p> <p>PM – SunWater must assess using current WRP model until it is legally changed.</p> <p>RM – Can we get any information on Upper Dawson for Santos?</p> <p>MW – If it is publicly available we will use it</p> <p>AC – Is SKM studying riparian corridor versus dam (flooded area). Biggest environmental concern. Defies SunWater to find an offset</p> <p>KL – All the tress in the inundation area will die?</p> <p>PM – Yes</p> <p>AC – Go to Bundalla Crossing and look</p> <p>PM – Agreed that riparian corridor is biggest issue. Offsets will be hard. EIS will show positive and negative impacts of project – someone (government) will then make a decision on whether it should proceed.</p> <p>AC – Wants research on replanting of riparian corridor around high water level</p> <p>SJ – There is high salt content 1 ft below ground. Will get leaching in wetting / drying area</p> <p>PM – We'll look at in EIS</p> <p>SJ – has had notice from DERM on earthworks because of Great Barrier Reef. Has SunWater had this kind of notice?</p> <p>PM – EIS will assess potential for impact on GBR</p> <p>RM – What are impacts of 24/7 CSG water into river?</p> <p>MW – CSG not part of Nathan Project. CSG projects will have to stand on own two feet and do their own EIS.</p> <p>Lots of requests for people to come to next CLG to talk about cumulative impacts of various development around the region.</p> <p>VB – Taroom District Development Association is having an information day for future development (1 September). CSG, SunWater, mines. Public information day, open to all.</p> | <p>NS to contact Cecily directly</p> <p>SKM will assess in EIS</p> <p>SKM will assess potential impact on GBR in EIS</p> |
|--|---|--|

| | | |
|-----------------------------------|---|---|
| | <p>JC – Need a DERM person at next CLG to discuss WRP and Reef.</p> <p>PM – Can ask representatives to come, but they may not come</p> <p>Agreement from panel to request a DERM rep to attend next CLG.</p> | <p>PM to invite representative from DERM to attend CLG#5</p> |
| <p>Topics for next meeting</p> | <ul style="list-style-type: none"> ▪ Groundwater (Dr Rick Evans or a suitable alternative) ▪ Hydrology (Flows, Water Quality, Fluvial Geomorphology) ▪ WRP Review (Invite a DERM Rep) ▪ Flood modelling (maps) ▪ Boggomoss Snail ▪ Fish Transfer / Impacts on Fish ▪ Riparian Corridor | <p>SKM /SunWater will bring information on Agreed Topics to CLG#5.</p> |
| <p>Affected Landholder Issues</p> | <p>KL - Want to know who is coming when?</p> <p>PM – Unidel will be coming around to discuss with affected landholders and then SunWater will follow up.</p> <p>Regarding field work, SunWater will get a definitive list and timeline and provide to landholders.</p> | <p>PM to prepare a definitive list and timeline for field visits for landholders.</p> |
| <p>Next meeting</p> | <p>Agreed tentative date: Monday 13 September 2010 (9am -2pm)</p> | |