

Meeting Minutes

Meeting name	Borumba Stakeholder Reference Group meeting
Location	The Pavilion, 77 Exhibition Road, Southside, Gympie
Date and time	24 November, 10:00 am to 12:00 pm
	Project representatives: Chris Gwynne (Queensland Hydro), Rebecca Powlett (Queensland Hydro), Ashley Zanetti (Queensland Hydro), Rebecca Grady (Queensland Hydro), Jessica Lew (Queensland Hydro), Tim McConnell (SMEC), Anthony Burke (SMEC), Col Langton (Powerlink), Luke Duncan (Powerlink), Jane Carey (DEPW), Tara Gardiner (DEPW)
Attendees	Environment group members: Narelle McCarthy (Sunshine Coat Environmental Council), David Arthur (Wide Bay-Burnett Environment Council), Glenda Pickersgill (Save the Mart River Coordinating Group), Nigel Parratt (Queensland Conservation Council), Ian Mackay (Mary River Catchment Coordinating Committee and Conondale Range Conservation Association)
Attendees	Business representative members: Petra Van Beek (Gympie Chamber of Commerce), Malcolm Oakley (Mary Valley Chamber of Commerce), Dan O'Regan (HQPlantations Pty Ltd), Graeme Elphinstone (Gympie District Beef Liaison Group), Janelle Parker (Mary Valley Chamber of Commerce)
	Community representative members: Carolyn Harris (adjoining landholder), Bruce Horsfall (Lake Borumba Fish Stocking Association), Don MacAulay (Lake Borumba Fishing Club), Senior Constable Bill Greer (Imbil Rural Watch), Gary Rozynski (local irrigator), Ian Stehbens (local community member)
Apologies	Luke Barden (Plumbing and Pipe Trades Employees Union), Sotera Trevaskis (Wide Bay-Burnett Regional Development Australia)

Meeting purpose and outcome

The purpose of this meeting is to engage with stakeholders to provide progress updates on the Borumba Pumped Hydro Project and to listen to stakeholder issues and concerns.

This meeting is part of the ongoing stakeholder engagement program for the Borumba Pumped Hydro Project.



Minutes

Agenda Item	Minutes and Actions
1.0	Introduction and housekeeping
Slide 1-5	Rebecca opened the meeting with the venue's emergency procedures and acknowledgement of country. It was noted that Ian Mackay is now representing both the Mary River Catchment Coordinating Committee (MRCCC) and Conondale Range Conservation Association.
	An update on what has happened since the last stakeholder reference group (SRG) meeting was provided. It was noted that Queensland Hydro (Qld Hydro) does not have geology results to share as lab results and reporting takes time but can get one of the geologists to visit and have an informal discussion with SRG members and stakeholders who are interested.
	The first transmission sub-group meeting was held in November (currently six voluntary members) and it is not too late for those interested to join the group. Today's transmission presentation is a more condensed version of what was presented to the sub-group.
	Rebecca opened the room to members before moving into the agenda proper.
Slide 6	Q. A question about process. Minister de Brenni said from the start that there will be no surprises with this project, we've had two big surprises. Firstly, the no notification of the National Park revocation for the geotechnical studies. Just wanted to flag that is a very poor kick-off to your stakeholder engagement processes. The other big surprise is the workers camp associated with the geotechnical studies is going to be fully operational by March next year.
	A. The team acknowledges and apologises for the poor engagement on the revocation news and there will be an informal Q&A session after this meeting to talk about what happened, a bit of why it might have happened, and take on board feedback.
	In the last SRG meeting, we introduced and started talking about the exploratory works. Since then we have been working through what will be required in order to enable us to start those exploratory works early to mid-next year (i.e. whether we need a camp and if so where, what are we doing with the spoil, etc).
	Q. There are a bunch of questions we have around that process, particularly in regard to impacts on national park boundary. We have had no opportunity to provide our feedback in regard to those concerns.
	A. There was a meeting with stakeholders in late October that was focused on traffic and transport. That was the first group that had visibility of where Qld Hydro is at with exploratory works – so that was the most detail we've had available for stakeholders in relation to the exploratory works. There is an agenda item and Qld Hydro will share that information on the exploratory works, stepping through what the camp is and other related matters.
	In terms of timing, Qld Hydro can't talk to everyone on the same day but in terms of the traffic and transport people, there were some things we wanted to get on board from those stakeholders in order for us to progress with our plans and development application, as we do need to do some road works, therefore they were consulted first with a greater level of detail around the exploratory works.
	At this meeting Qld Hydro want to get the SRGs comments and input to enable us to proceed with the development applications that might be required. Qld Hydro is talking to stakeholders about what Qld Hydro are doing, where Qld Hydro are doing it, what the issues and concerns are to enable us to progress the development applications.
	Rebecca noted that the geotech drilling process is slightly different to the exploratory works drilling process, which does require the camp.



Agenda Item	Minutes and Actions
	Chris explained that the reason there hasn't been a detailed conversation about the exploratory works at this level is because Qld Hydro are still defining the scope of works. Once the scope if defined, Qld Hydro will be entering into a State and Federal planning process which would involve all the statutory requirements around consultation and public notice. The SRG will be the first stakeholders to hear in detail about what that looks like.
	Qld Hydro would like the camp by next March but that is unlikely to happen because of the timeframe for State and Federal planning approvals, which will take most of quarter one – also Qld Hydro is unlikely to be able to get a hold of a temporary camp in that time.
	Once Qld Hydro has planning approvals Qld Hydro will then start road access upgrade works required to get access to the site. Any on site work, including the camp, will be the second half of next year.
	Chris further reiterated the exploratory works that requires the camp is for the exploratory tunnel that is on Qld Hydro land, not National Park. The exploratory works are a separate planning and approvals process to the work for the National Park.
	Tara from the Department of Energy and Public Works (DEPW) further apologised for what happened and how the community found out about the revocation process. DEPW is fully focused on doing better and happy to talk further about what that means and how DEPW can do that and will be more mindful going forward.
	Q. I want to bring up irrigation. I know the Minister guaranteed current allocation, but I have seen nothing about future water allocations. Irrigation growth of the district is pivotal for the region and hydro cannot come in and take water away from irrigation.
	A. Qld Hydro acknowledge the issue raised and future growth is an issue that the Department of Regional Development, Manufacturing and Water (DRDMW) is working through in the revision of the water plan. Our latest notice on that plan is that it will be out for public comment next year – we are as keen to see that plan as you are. We are certainly working with DRDMW on our modelling impact and results. Qld Hydro won't have all your answers today but will make note of your issues.
	Q. A suggestion to minimise future 'surprises' could be having a project spreadsheet that identifies the possible on ground project activities that could happen around Lake Borumba. When the activity comes up, it entered into a database and flagged with stakeholders. Aware that it is a big wish and would involve stakeholders being kept apprised of internal activities.
	A. It is a learning experience for all of us and Qld Hydro will learn from out mistakes and do better next time around. Qld Hydro will continue working with stakeholders to figure out what works best for when and how we might communicate information.
2.0	Queensland Hydro and Powerlink
Slide 7-8	Rebecca briefly introduced Qld Hydro which was created to develop large scale pumped hydro projects in Queensland with the release of the Queensland Energy and Jobs Plan (QEJP). It was reiterated that the project team remains the same and will continue to work closely with Powerlink, who remains responsible for the project's transmission connections.
	Issue with Qld Hydro emails going into junk mail for some stakeholders was flagged. Stakeholders are asked to check their junk mail and to please email borumba@qldhydro.com.au if they have any troubles receiving emails from the project.



Agenda Item	Minutes and Actions
3.0	Exploratory Works
	Chris provided an overview on the scope of the exploratory works including the two main stages of the project: the exploratory works package and the drilling an exploratory tunnel. There are three scopes:
	scope for exploratory tunnel;
	 scope for the geotechnical drilling onsite; and
	scope around road access works.
	The exploratory work package consists of pre-work required to understand the geology to inform the design of the project. One of the biggest uncertainties with the technical side of hydro power schemes is the actual rock. A way to identify what rocks are below is with traditional geotech drilling, which Qld Hydro has only been able to do a little of due to access constraints.
	Qld Hydro know the works trigger State and Federal planning approvals process and have also included in the scope the ability to do geotech drilling in the National Park (which is where the linkage appears with the revocation process). The best way to understand the risk is to drill a real tunnel (i.e. an exploratory tunnel) on the alignment of one of the tunnels that will be reused in the real project. If the project does not go ahead, Qld Hydro will remediate the work. These works will require the construction camp.
	Qld Hydro would like to start the State and Federal approvals process in the next few weeks, but it has been a challenging process so far. Qld Hydro need to finalise the footprint for the works, which will drive when the State and Federal approvals process starts.
	Qld Hydro expect planning approvals to go through to the end of Q1, then start early civil works on roads to enable access via Bella Creek Road in Q2 next year. Any formal work around exploratory tunnel drilling or construction camp work will be Q3 onwards. Two years of work that will be done in parallel with the formal environmental impact statement (EIS) process for the overall project.
	Chris highlighted the two key activities from next year onwards will be managing this package of work and conducting the full EIS for the project.
	Q. What frameworks will be used outside the EIS – <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC)?
	A. First referral to the Commonwealth to determine if a controlled action. Once that is determined, there are different levels of assessment that the Commonwealth can use, and we still need to work through that with them. We have been liaising with the Commonwealth on triggers and the level of assessment as not all assessments at the State level can fit into the bi-lateral assessment process. What triggers are at the State level will drive how the Commonwealth might choose to assess the exploratory works and the development application. Qld Hydro believe the broader project is an EIS and can be assessed under the bi-lateral agreement.
	Q. Is there exploratory drilling with the lower and main dam?
	A. No, just more geotech holes like Qld Hydro has done – we need more drilling on either side of the dam to understand what the rock is like and the excavation. Getting approval has been one of the challenges with National Park on one side and State Forest on the other.
	Q. Will that still involve incursion into the National Park?
	A. Yes, on one side.
	Q. It would be very useful to provide a list of the State legislation that the exploratory scope triggers.
	A. Yes, we can do that.



Agenda Item	Minutes and Actions
	Action: Queensland Hydro to provide a list of State legislation triggered by the exploratory scope.
	Q. Is this project going to be nominated for consideration as a Coordinated Project under the <i>State Development and Public Works Organisation Act 1971</i> (SDPWO Act) and if so, when will it happen? Is it after the exploratory works or should it happen now?
	A. Qld Hydro has started discussion with Coordinator-General's (COG) office for that larger project but have been talking to them about the exploratory works. To date COG has agreed that the exploratory works is not of a scale to trigger a coordinated project process.
	Acknowledged that is difficult that exploratory works and EIS are happening in parallel to preparation of the detailed analytical report (DAR) to give to government for an investment decision. The schedule for delivery means Qld Hydro can't hold off submitting an initial advice statement (IAS) and development application.
	When Qld Hydro formally lodge the application for the exploratory works and the IAS for the project EIS, Qld Hydro will put a note out advising the SRG that we have (or about to) trigger the start of the formal process.
	Action: advise SRG when exploratory works application and IAS for the project is formally lodged.
	Q. When does the preliminary business case and detailed business case kick in?
	A. Start of the process is the delivery of the current report [DAR] which will have the basic design and spec of the project, what are the risks and opportunities across all facets, are there any fatal flaws that would stop the project, how much it will cost, and the detailed implementation schedule for government to consider. Government will get that amount of information in March and will consider whether to proceed with the project. If the government chooses to not to proceed, Qld Hydro will stop all processes currently underway. The decision will effectively be made before Qld Hydro start drilling an exploratory tunnel.
	Q. In the report being provided to government in March next year, is a cost benefit analysis included and will that be publicly available?
	A. There will be financial, commercial, and economic analysis in that report. The full report will be provided to government and there will be a publicly released version that will be an abridged version as some elements (particularly the commercial parts) cannot be released. The report will essentially be the Government's report, but Qld Hydro will be endeavouring to make as much of the content publicly available as we possibly can.
	Q. Will stakeholders likely get a chance to look at the report and provide high level feedback before it gets submitted to the government?
	A. DEPW will take the question on notice and give it some thought.
	Tara noted that the whole purpose of these sessions is to share results from the investigation and the report should not be saying anything that we haven't been talking about through these sessions (that is the intent).
	Q. Does the report also look at comparing with other options (a plan B) if the project doesn't go forward?
	A. The scope of the report to Government is tied to assessment of this project as the Government's preferred project to be taking forward as part of the first stage of the QEJP.
	Tara provided an overview on the extensive studies undertaken by Government leading up to the selection of the two pumped hydro sites identified in the QEJP [Borumba and Pioneer-Burdekin]. The Minister has committed to release information around the process and analysis around site selection (Queensland Hydro Study Summary). The department hopes to release the report before



Agenda Item	Minutes and Actions
	Christmas or not long after but is subject to approvals from the executive government. DEPW is happy to circulate the document to the SRG when it is released.
	The Queensland Hydro Study summary will talk about the process, criteria, and outcomes of the analysis but not necessarily for every single site. Chris noted that the report for Borumba will point to the Queensland Hydro Study Summary and the QEJP as inputs into the Government's position on asking us to assess Borumba.
	Q. How did you go about selecting all the sites that will be the Queensland Hydro scheme?
	A. That will take a very long time (involves a long process) so probably best to wait for the document to come out as that is quite a detailed conversation. The department is happy to come talk to the SRG in more detail after release of the report and time for members to digest the reports content.
	Q. The little overview figure on slide 10 is too small to read – could you provide us with a full-size figure when emailing out the presentation slides?
	A. Yes, we can.
	Action: Qld Hydro to email a larger version of the exploratory works figure with the presentation slides.
	Chris highlighted that spoil will be stored on site (no trucking of spoil offsite) and Qld Hydro might be able to use it for the main project on the basis it goes ahead. Spoil is planned to be stored on Qld Hydro land.
	Q. What sort of volumes are you talking about and is there any risk of acid forming?
Slide 11-12	A. There are all sorts of potential issues getting rocks out of the ground (don't know what the composition is). The rocks will be assessed as they come out for quality and if any issues are found, they will be managed on site. There is an assessment process and a spoil management plan will be developed as part of the State and Federal assessment required for this work.
	The volume is noted on the information session posters.
	Tara raised if another slide with key timeframes associated with the different processes can be added.
	Action: Queensland Hydro to include a slide on timeframes to the slide deck.
4.0	Hydrology
Slide 13-14	Tim introduced agenda items for the strategic water planning considerations for the project. Underpinning the water planning consideration is the hydrology modelling and the IQQM model underpins the water plan. The model looks at the transfer of water volume on a daily basis.
	There are various scenarios assessed including predevelopment scenario (the natural hydrologic processes in the catchment) and the base case scenario (development, storage, and diversion of water use in the catchment). The same tool can be used to look at different project arrangements and operations of the scheme, and report back on changes from the base case and compliance with the Water Plan.
	Q. Is the geographic scope of our assessment just limited to Yabba Creek catchment or looking at the entire Wate Plan area?
	A. We are looking at the entire Water Plan area and compliance with all water reporting nodes. When you go through more detailed assessment, you might identify specific areas of concern that aren't necessarily reporting nodes within the plan and assess impacts of those areas.



Agenda Item	Minutes and Actions
	Q. You are using the same modelling that the water planners are using to underpin the review and replacement of the Water Plan (Mary Basin) 2006? Exactly the same datasets?
	A. Correct, same datasets. Now that's been migrated under the new Water Plan to a different platform, so we will migrate across to that, but we will always be using the current model to report back for compliance.
	Q. Regarding the requirement in the <i>Water Act 2000</i> for the Minister to consider implications around climate change on the future availability of water, are you guys factoring that into your modelling the same as what the water planners are doing?
	A. Qld Hydro is. Qld Hydro can't comment on is how that will be treated under the revised Water Plan; however, Qld Hydro will use the best science available to assess the risk to the project and see how it operates.
	Q. The sizing and configuration of the project is critical to the assessment of the pumped hydro project on the Water Plan. I don't have clarity on how big the lower and upper storage is going to be – are you able to share that information with where you have landed at right now?
	A. That is covered in presentation. Qld Hydro has run a range of scenarios to see how they operate, and Qld Hydro has a project definition to refer to.
	Q. You mentioned one of the nodes is at the mouth of the river – are you talking about the barrage or really at the mouth?
	A. Its at the river mouth.
	Tim provided an overview of the scope of the hydrologic studies conducted to date including what the modelling is not suitable for and its objectives. Qld Hydro study protects the existing allocations and come up with a project that will allow full maximum hydropower generation which informs how the scheme is sized.
	Q. The flood hydrology and hydraulics modelling will be a completely separate set of modelling?
	A. It is separate.
	Q. Is there a timeframe for when the second lot of flood modelling will be done?
	A. That is being done by the consultant designing the lower reservoir and already underway. It is part of their scope to address those issues.
Slide 15-16	Q. Given the existing environmental flow objectives (EFO) and water allocation security objectives (WASO) may change in the new plan, this means you will have to redo your assessment based on the new Water Plan in relation to new allocations, EFO, and WASO?
	A. That is correct, Qld Hydro will have to align the project with the new Water Plan. What Qld Hydro has done to date is sensitivity analysis on a range of scenarios to understand the risk profile and whether that scheme is viable.
	A. The way we manage that risk is running a range of sensitivities and engaging with DRDMW on working groups to make sure that what Qld Hydro is doing is within the scope of what the plan is expecting. Qld Hydro isn't exactly privy to a large proportion of the content construction of the draft plan.
	Q. Will it be accurate to say that the pumped hydro proposal will be compliant with the new Water Plan?
	A. It would be a cause for concern if the project didn't fit into the new Water Plan. Qld Hydro is working closely with DRDMW. Qld Hydro has not been privy to the plan but will continue working closely to make meet the government's full suite of objectives in relation to water and ambition to decarbonise our energy systems.



Agenda Item	Minutes and Actions
	Q. From a community point of view, there is a strong feeling that we do not have 150 gigalitres (GL) in the system as a reserve and that's really the big difference between the current plan and the feeling is for the future plan (just putting it out there as a key issue).
	A. This is a message that Qld Hydro has heard loud and clear, and DRDMW as well.
	Q. Could this project operate if it wasn't at full capacity?
	A. Yes, we can run a partial operation at about 80 GL.
	Overview on project compliance with the current Mary Basin water plan provided.
	Q. Struggling with definition on non-consumptive water. It may not be consuming water in the traditional sense, but it is reserving/quarantining a large amount of water for one particular purpose. Water required to fill and operate the pumped hydro doesn't provide any environmental or any other economic benefit.
	A. In the definition it is not using the water, there is additional losses associated with operating the scheme. The first fill impact, which is short and acute impact, and then there is the long term evaporative losses and minor seepage losses.
	A. DRDMW does recognise that this is an unusual water use – it does not fit into the traditional definition of water use and is not a usage pattern that Queensland is used to dealing with.
	Q. The statement is misleading, it is not a traditional non consumptive use of water. There needs to be discussion between the department, you guys, and stakeholders to come to an understanding on what this take of water is.
	A. Qld Hydro will take this feedback.
	Q. The other thing being discussed is whether the volume of water needed to build pumped hydro schemes needs an allocation under the Water Act. For me that is a very slippery slope that totally undermines the integrity of the Queensland water planning framework – very concerned about that.
Slide 17	A. Qld Hydro understand these questions, but some of these are water planning questions. The public release of the DAR will probably closely coincide with the release of the draft plan for the Mary Basin and Qld Hydro expect these things will become a more integrated discussion next year.
	A. Qld Hydro is dealing with a project that is new to existing legislation and we will keep finding thing as we go along, but this is why we are working closely with a number of government departments to understand how we can work through these processes.
	Q. When you are talking about water storage there will also be evaporative losses out of the system.
	A. Correct, there will be ongoing loss from the system.
	Q. A statement was previously made that there is no environmental benefit from large water storage – I will argue about that because Lake Borumba has provided a whole series of environmental benefits in the Yabba Valley.
	A. There are downstream impacts from raising of dams. One of the process through the EIS is looking at the baseline flow regime and trying to manage the flow releases to mimic the existing flow regime as closely as possible. There are impacts on the environment that will need to be mitigated and managed, and that is what the EIS process is for.
	Tim noted that raising the Borumba dam and establishing the upper reservoir will divert more water from the basin during the initial filling of the storages and it will lead to increased seepage and evaporative loss with the greater storage of water. This will need to be considered within the revised water plan.



Agenda Item	Minutes and Actions
	Q. Assuming that the water required to fill and operate the pumped hydro will require some sort of allocation under the Water Act, will it be considered high priority or medium priority water?
	A. Qld Hydro can't answer that. There will need to be transitional operating rules to protect the existing allocations through that construction phase. What that looks like and how they're handled by the revised plan, Qld Hydro can't say.
	A. There is no detrimental impact on the current medium and high priority allocation out of Lake Borumba with the pumped hydro there. In the Qld Hydro assessment of the reliability of the scheme, at all times Qld Hydro meet the current requirements for existing allocations. Increasing the capacity of the dam actually improves the overall performance from the reservoir because you have increased water and storage.
	Q. The new project is making more water available for the Mary Valley?
	A. That is a question for water planning. Effectively at full supply level, there will be 218 GL in the lower reservoir of which 68 GL would be provision for pumped hydro operation. How the rest of that water is managed in that reservoir is a question for the planning scheme itself.
	Q. There will be more water to be managed?
	A. Yes, that is probably a nice way of putting it
	Q. When you redo these slides, would be worthwhile to include statement that existing allocations to high and medium priority water are guaranteed.
	A. That is a fixed input into the work Qld Hydro is doing in that Qld Hydro need to design a hydropower scheme that does not negatively impact any of the existing water allocations or environmental flows, and Qld Hydro will need to redo this when the new plan is released.
	Q. I think that is where the context needs to be clearer. We are talking about the future use of the pumped hydro operations when the Mary Basin Water Plan is yet to be finalised but referring to current allocations as in the existing Water Plan. There needs to be some transparency and connectivity on how that is being addressed. Currently as the hydro scheme is being modelled, the undertaking is not to affect or change any existing allocations which are recognised under the current plan. Need further clarity around terminology and tense.
	A. Qld Hydro acknowledge that it's not a great outcome to be doing this work in parallel with the review of the plan. Once draft plan is released next year, Qld Hydro will seek to have a more integrated discussion on some of these issues.
	Q. There has to be certainty that this project is not influencing the outcome of the new Water Plan.
	A. Noted.
Slide 18	Overview on storage plots over the simulation period graphs provided. This is a hydrology model over long term climatic variability (120 years) and the blue series shows the stored volume in the Borumba reservoir over that time.
	Q. The 155 m AHD, is that a 20 m raising?
	A. Yes, correct.
	Q. The scale for the bottom graph is not the same as the top graph?
	A. No, its not.
	Q. It would be a different looking graph with comparable scales – think that would be a vast improvement.
	A. Qld Hydro will take that feedback.



Agenda Item	Minutes and Actions
	Action: update bottom graph with same scale used for the top graph.
	Q. The graph is hard to read, can see what the actual units are – what is it saying?
	A. It is showing the stored volume going up and down over time through runoff into the dam, evaporation, and so on.
	Q. At the moment the dead storage for the dam has occurred ten times?
	A. Has occurred quite a few times.
	Q. So your message there is that there will be no time where it will get to zero availability?
	A. Not through that project scenario model.
	A. This is the historical analysis from 1890 to present day that's trying to stimulate if we had the two sized dams there.
	Tim acknowledges that climate change is a hot topic and Qld Hydro will assess it to the best available science – there are 11 global climatic models endorsed by government and there are difference representative concentration pathways. Qld Hydro can't predict the future but will know a range of outcomes and Qld Hydro can assess the project within those ranges.
	Q. The second half of that first dot point, how does that statement fit in with discussions we've had about guarantee high and medium priority allocation?
Slide 19	A. That top bullet point is the effects of climate change – a statement on the impacts of dry climate change.
	Q. Are you saying that because of climate change, the existing medium priority allocation may not be able to be met in the future?
	A. Yes, if that climate change pathway eventuates.
	A. This top statement is really around the unpredictability of the rainfall and dry scenarios Qld Hydro is trying to model. There will be an impact of climate change on the wider basin planning. Once again that is a wider discussion for the draft plan itself. Qld Hydro is taking the worst case of the dry scenarios to see how the catchment and scheme will perform as a conservative position.
Slide 20	Q. Given the overlap with the Mary Basin Water Plan review, can we please have somebody from the water planning department at the next SRG meeting to provide a bit more detail on where the plan is going?
	A. Qld Hydro would be happy to do that. The team is doing their best to prepare for where that water plan will eventually land through the review. At the governance level, DRDMW are closely involved with the project itself and we are managing the two parallel processes the best we can.
	Q. The other obvious stakeholder group not here is Seqwater. Is it possible for a representative from them to be here?
	A. Qld Hydro can take the feedback to those departments but that is a question for those departments to decide how they want to conduct their engagement.
	Q. A lot of our issues revolve around the water issue.
	Q. The most common question asked by grazing landholders is when will we know that there is sufficient water in the Yabba sub-catchment to drive this pumped hydro project? I ask this every meeting and have been given the same answer to take back – people are getting tired of getting the standard answer of no decision will be made until the Water Plan is finished.
	Can Queensland Hydro be more proactive in helping SRG members get some more proactive feedback/answers? The standard answer is causing more and more cynicism in the community.



Agenda Item	Minutes and Actions
	A. Qld Hydro is hearing the feedback. The DRDMW representatives have been to other meetings and attend community information sessions – there is no deliberate reason why they are not here today.
	A. The way Qld Hydro deal with that uncertainty is to make the assessments conservative to begin with and do the sensitivity analysis to try to make sure there are no fatal flaw in the project.
	Tim outlined how the initial fill analysis was conducted and the minimum (37% or 80,000 ML) required to operate the scheme.
	Q. Are you running any scenario on the implication of climate change on the future availability of water? When will we get to see that data?
	A. Have not done that yet and in the next phase of the project when Qld Hydro get a hold of all that information and get to rerun the model again.
	A. The climate horizon Qld Hydro is looking at for the initial fill is in 2050. From a project perspective, climate change would likely stretch scenarios and from a first fill analysis, it probably will not change the percentages of the probability fill time. Qld Hydro will find out during the next phase of work, when that assessment is done.
Slide 21-23	Q. Is the last dot point on slide 22 in conflict with an earlier dot point where you said climate change may challenge medium water entitlements?
	A. One is talking about the impact of climate change while the other is talking about the impact of having a larger storage.
	Q. I challenge that 80% fill in five years. What happens in this catchment is a big flood every 10 or 12 years so can't see this probability actually existing in real life. If you look at the stream run flow of this catchment over the past 20 years, it is actually half of the stream flow in the historical time of 110 years.
	A. Qld Hydro can do the same analysis using just the data from the last 20 years to see if it makes a difference.
	Action: run the data from the last 20 years through the model.
	Next steps outlined including provision of the hydrology report to State Government.
	Chris raised that a version of the hydrology report for early release is being prepared now that will go to government for endorsement. It will effectively be a summary of what is presented today, and feedback received today on language has been really useful.
	Q. How soon will we see that summary version?
Slide 23	A. Likely after Christmas in the early new year. Qld Hydro will send the summary to SRG members it becomes available.
	Q. Will the summary be released before the Water Plan and if so, how do you know what you are providing in the summary is going to comply with the Water Plan?
	A. DRDMW also reviewed these slides and are comfortable with the information presented today.
	Q. This is going to be tested against the current plan, not the new plan? The new plan could be totally different?
	A. Qld Hydro will have to rerun all the analysis with that new plan data and if it ends up being a change to the project definition or the operation parameters, that is what Qld Hydro will need to do. The way Qld Hydro has protected us against that probability at the moment is having the water planning people involved and overseeing the work we are doing, and we are running sensitivities on some of those key parameters that are relatively extreme. It could happen that the



Agenda Item	Minutes and Actions
	project design does need to be reviewed in light of the new plan and we will do that if that is the case next year.
5.0	Traffic and transport
Slide 25-27	Anthony provided an overview on the study particularly the different parts being undertaken relating to the different phases/packages of work (i.e. DAR, EIS, exploratory works). Qld Hydro has really only got one way in for a sealed road but there are old forest roads that Qld Hydro is investigating as well. The main road will still be through Bella Creek Road and Yabba Creek Road.
	Today's focus is on the order of magnitude that the community will see on the local roads.
	Anthony provided a summary of the key assumptions for the exploratory work traffic impact assessment (TIA) including workforce numbers, hours of operations, vehicle types, and approximate number of vehicle movements.
	Q. The preliminary tunnel work, has that been considered separately to this (the main project)?
	A. Yes, we are looking at that smaller workforce number required (i.e. 37 workers in total at the peak, 25 to 30 workers on site). Workers will be bussed into the site and there will be a small construction camp onsite for the exploratory works that will accommodate a percentage of the exploratory works workforce.
	Chris highlighted that physical equipment required for exploratory drilling gets transported to site, stays on site until all exploratory works are completed before being transported offsite. There will be no back and forth transport of equipment every day.
	Q. So there would be no upgrade of the road with this?
	A. Qld Hydro is not looking at a mass upgrade, but we are working with Department of Transport and Main Roads (DTMR) to look at the structure and strength of bridges and culverts to withstand project loads. We must do a structural condition assessment of those structures and culverts to determine if they can take weight and will trucks be able to go down – we are working through the detail.
Slide 28-30	Q. Will DTMR have to declare this a main road to do the upgrades? Will maintenance revert back to the local council?
	A. What Qld Hydro is talking about now is for the exploratory works. The road upgrades Qld Hydro is talking about now are around can the truck get around that corner and traverse the culverts which have dips and where heavy vehicles may get hang up/bottom out. In terms of the ongoing management to council, Qld Hydro don't envisage it to be that different to what is done now.
	Q. We know we got a commitment to that Western Creek Road access to the dam and coming down Mary Valley Road, not through Imbil. It is a forest road used by timber trucks and Derrier Road takes tankers at the moment. It is a flood escape road for people up there and is the obvious road as it only has one creek to cross.
	A. Qld Hydro has investigated and driven that. It is not sealed but Qld Hydro could do works to make sure Qld Hydro can get heavy vehicles in. There is a slide on the main works, this is still exploratory works package.
	Q. So why wouldn't the exploratory works use that road around as well?
	A. Qld Hydro must get up to that upper reservoir area. There are still challenges getting through that area.
	Q. You also have Derrier Road which is available for you to do that kind of movement if you wanted to.



Agenda Item	Minutes and Actions
	A. Qld Hydro will take offline to have a look at that piece between Imbil and the current dam wall to determine if it is feasible for the exploratory works to utilise Western Creek Road. Take as an action to identify.
	Action: investigate feasibility to use Western Creek Road and Derrier Road for exploratory works.
	Stakeholders noted that it would be much safer to utilise the other access road and while the number of vehicles identified may be considered small/low in a project sense, it would be a significant increase on what is already being experienced and existing to a degree.
	Q. Where you go for the proposed main site for the exploratory works, is that an existing road already to that point or does that need to be constructed?
	A. There are existing recognised roads. The main two scope of works for roads is minor upgrades, to make sure Qld Hydro can get the equipment in and out at a later date, and then making sure Qld Hydro can get a safe and manageable access across to Yabba Creek into the site (need to have some bridge arrangement to get to the actual worksite itself).
	Q. The proposed camp site area?
	A. Looking at the junction of Bella Creek Road and Borgan Road, that's the point is a sensible place due to protection from flooding events.
	Q. Western or eastern side of the road?
	A. Western side.
	Q. On Powerlink land?
	A. No, that land is currently owned by DRDMW and has previously been leased to a grazier. That grazier has just relinquished that lease and is another reason why Qld Hydro has been talking to DRDMW about what they are planning to do with that parcel of land and if there is an opportunity in there for Qld Hydro.
	Q. To purchase it?
	A. To purchase it or other arrangements in order to have a camp there (i.e. permit to occupy or lease). These are things Qld Hydro is still working through as part of the development application.
	Q. Is that parcel of land part of the proposed National Park?
	A. Don't know if some or all of it is, Qld Hydro will have to check. Qld Hydro is talking to DRDMW in terms of the exploratory works camp. For the exploratory works the focus at the moment is on a certain block of area of a certain size to house the 30 to 40 workers required.
	Q. I thought most of the people would be bussed in?
	A. Qld Hydro don't have 30 to 40 workers driving in and out of their shift every day. Qld Hydro is looking at bussing workers at the start and end of their shifts.
	Q. So the camp is not for 30 or 40 people?
	A. The campsite itself is looking to house workforce numbers identified on slide 28. The way to keep numbers low is to bus workers in at the start of their shift, they stay on site during their full shift (i.e. 12 hours or more) and then they get bussed out at the end of their shift while a new group of workers gets bussed in to keep the drilling process running 24/7.
	Q. So it's not everyday that the busses are going up and down, it's every end of shift.
	A. No, not every day – 30 light vehicles one way per week is equivalent to 15 recurrent trips a week, which is two vehicles a day. You probably already see this number from us (or more) going up there now. For heavy vehicles Qld Hydro is not talking about massive huge vehicles, just solid rigid trucks (i.e. semi-trailers and b-doubles).



Agenda Item	Minutes and Actions
	Q. If you are actually excavating a tunnel, that's going to need some big equipment?
	A. Yes. Once in they remain on site for two years then get transported out. It's these first ins and outs that needs those minor upgrade works. There will always be impacts to set things up, but during a very narrow window for a very short term.
	Q. If the project does not go ahead, does the tunnel need to be filled back in?
	A. Qld Hydro will have the rubble/spoil on site. You wouldn't fill the whole thing in, you would probably plug it. On that basis you will need to be managing spoil on site as if it is going to stay there. As part of the Qld Hydro development application, Qld Hydro will need to include a remediation strategy for if the project does not proceed.
	Q. Power and waste management for the camp?
	A. Will be located on site and self-powered. There will be temporary water infrastructure for the camp and the drilling activity as well.
	Q. Can I just clarify that the worksite on the western side of the road, that's not the camping or water reserve?
	A. It's freehold land that was bought by the State of Queensland many years ago in the event that one day Borumba Dam might be expanded – that's why DRDMW are the actual owners of the lot not the Department of Resources that normally looks after reserves and leasehold land.
Slide 31-32	Anthony provided a summary of the key assumptions for the EIS TIA assumptions for the upper and lower dam construction. Lower dam will take four years to construct but Qld Hydro does not currently know what will come from where yet.
	Chris raised the Borumba dam and rest of the hydropower scheme can be thought about as two different project sites as they are physically so far apart. The level of definition around traffic and transport is still very early because there are some key design decisions that need to be made that have a very big impact on what the traffic and transport implications are.
	For the lower dam, there will likely only be one way getting to the site (practically speaking) and Qld Hydro need to work out what that looks like in the next stage. For the upper dams, that's a very different set of considerations due to its location and likely going to need multiple access routes.
	The next phase will involve more engagement and consultation about how the traffic and transport gets managed. Qld Hydro hasn't decided on the main basic construction technique for the upper dam yet and that decision in itself changes the traffic and transport completely. Understand that there are people in the community do want to talk about traffic and transport but there's a sequencing that's hard to rush.
	Anthony noted Qld Hydro needs to be flexible to a degree with the community to work through traffic and transport and there is still a lot of work to be done. What is currently presented is the peak (worst case scenario) which is a big number but there will be a spread over that time period. Qld Hydro realises there are constraints to get in and out of site – there will be some winners and losers.
	Chris noted the animated discussion at the traffic and transport meeting and the importance of the group. Rebecca confirmed the stakeholders invited to the initial discussion included all landowners along Bella Creek Road, all residents along Little Bella Creek Road that have registered their interest in the project, and businesses (Mary Valley Chamber of Commerce and HQPlantations). Qld Hydro continue to engage and consult as and when information becomes available.



Agenda Item	Minutes and Actions
6.0	Ecology
Slide 34	Rebecca noted one round of terrestrial and aquatic field surveys have been completed and will feed into the DAR. More field surveys will be conducted as the project progresses towards the EIS to capture seasonal variability, with the next round of seasonal surveys about to commence.
	Rebecca provided a summary about the aquatic ecology survey area and sites.
	Q: How far down (survey sites)?
	A. In term of survey sites, they went a number of kilometres downstream from the dam wall into the Mary River and looked at where the confluences were.
	Q. They went down as far as the mouth of Yabba Creek and further?
	A. Yes, they actually had sites in the Mary River. The project team can provide better mapping.
Slide 35	Action: Queensland Hydro to send better mapping to interested SRG members.
	Q. They didn't go down as far as the estuary?
	A. No, not in their field survey; however, the desktop assessment did take it in account.
	Q. In the desktop analysis, did they also look at impacts on the Great Sandy Strait Ramsar wetlands? That will be one of the triggers under the EPBC Act, it is a matters of national environmental significance (MNES).
	A. Will confirm and get back to you on that. The team is aware that it is a MNES and it is included in the scope; more a matter of whether it has been considered in this report at this stage.
	Overview of survey methods and study results was provided. In terms of results, everything that was found was what had been anticipated through the desktop assessment.
	Q. Have you got more detail on the non-native species that were found?
	A. Yes. Goldfish/common carp (restricted to above the dam wall), Mozambique tilapia (restricted below the dam wall), swordtail, platies, and mosquito fish found in various sites.
	Q. The other native fish that should be included is the freshwater mullet. The MRCCC has been trying to determine whether they are endangered as it used to be around in large numbers.
	A. The list is what the ecologists found but Qld Hydro can ask the team to target for that species in the next survey.
	Q. The other two things would be migratory species like eel and mussels.
Slide 36-38	A. One migratory eel was found above the dam wall; these (migratory) species are what Qld Hydro want to target through the different seasonal surveys. Will check the report regarding mussels.
	The preliminary assessment identified likely impacts associated with water speed, levels, and barriers to fauna movement. While there will be impacts, Qld Hydro does not expect that it will be something that can't manage.
	Q. Did they only look at direct impacts to species? If that is the case, are they going to assess the indirect and cumulative impacts?
	A. The indirect impacts will have to be assessed as part of the EIS. For cumulative impacts, Qld Hydro will have to wait and see what the project's EIS term of reference (ToR) says as to where that line is drawn.
	Q. What about impacts to ecosystem services and functions rather than species?



Agenda Item	Minutes and Actions
	A. This is the results of the first round of aquatic ecology survey, so the amount of analysis that Qld Hydro can do in term of those ecosystem services based on this information is something that will have to build on through the EIS process, which is the next stage.
	Q. The ToR for the EIS will be a public facing process, to comment on the draft ToR?
	A. Yes. Qld Hydro is preparing the EIS level studies because Qld Hydro need to capture those seasonal variations. The EIS team continually monitors what the Commonwealth and State are issuing in recent ToRs, including any emerging issues, in order to be adaptive in how Qld Hydro studies are scoped.
	Q. The draft ToR will be available for public comment in what sort of timeframe?
	A. Would hope in 2023. What needs to be done first is submission of the initial advice statement to the Coordinator-General to determine if the project is a coordinated project, and referral under the EPBC Act for the full project to determine if it's a controlled action. The draft ToR goes out on public comment (the process is managed by the Coordinator-General) with comments taken on board then a final ToR issued to Qld Hydro.
	Q. This doesn't refer to potential transmission lines?
	A. No. Qld Hydro is looking at the Borumba project and the transmission lines will need to do all the required assessments and approvals. However, Powerlink will need to find their corridor first before they can start doing their studies.
	Q. Have you started looking at whether you can find the required offsets?
	A. Yes, Qld Hydro has started to look at offsets including understanding what areas might be impacted and where offsets might be coming from. The first option is not to offset, but to avoid as much as possible. For example, the reference design did reduce the new inundation area compared to the concept design. Qld Hydro will have to offset as we are building a whole new upper reservoir and Qld Hydro know that will be a big number in terms of area. Qld Hydro is working through that and will be talking to various stakeholders to try and help us determine how Qld Hydro might meet those offsets when we get to that.
	Q. Going back to another commitment from the Government that this project will deliver benefits to nature/the environment, what is the net benefit to nature of this project? Wanting to put this on the front burner and make sure it is factored in the front end of the project rather than the back end.
	A. Can't answer at this point in time but that is one of the requirements that Qld Hydro will have to come up with. Qld Hydro is working through this and once we understand what those benefits are, Qld Hydro will be sharing with stakeholders.
	Rebecca provided an overview on the first round of the terrestrial ecology survey which focused on the inundation areas (i.e. upper reservoir and new inundation area). The next survey will take a more regional approach. Again, everything that was found during the survey was what had been anticipated to be there (i.e. threatened ecological species, regional ecosystems of concern, and threatened fauna).
Slide 39-40	The preliminary impact assessment has identified a range of potential impacts with some being unavoidable (i.e. building of upper reservoir). Qld Hydro is trying to avoid sensitive areas where possible to minimise impacts.
	Q. Have they considered the Wide Bay Burnett Draft Regional Plan biodiversity corridors and strategic environmental areas in the vicinity of the project?
	A. Yes, they have been looking at those and the potential impacts.



Agenda Item	Minutes and Actions
7.0	Transmission corridor study update
Slide 42	Col noted the study is very early in the process still and the focus of previous consultation was on the investigation area. The corridors presented now are still very wide (4 km) and through working with the community, the many corridors will be narrowed down to a recommended corridor which will be narrowed to 1 km wide. The next stage involves a lot of fieldwork, work with property owners and stakeholders, and field investigations. This is when the EIA/EIS type of work develops on that corridor and narrows down to 70 m wide.
	Col highlighted that the entire 70-m-wide corridor doesn't get cleared as Powerlink will look at the terrain and leave vegetation in the lower areas. If there is vegetation of concern, Powerlink will try to avoid and look to mitigate (such as with taller structures). Looking into offsets is the last resort and that is why Powerlink starts with wide corridors that we can move around in that corridor.
	Col provided an overview on the Queensland Energy and Jobs Plan (QEJP) including:
	• Tarong power station a good potential future location for a Renewable Energy Zone (REZ) due to existing infrastructure and services, and nearby communities and workers.
	• Importance of the integration between pumped hydro and transmission, including connection of pumped hydro into the grid and connectivity more broadly across the energy network.
	• Important role pumped hydro plays in increasing the capacity of renewables (currently capped at approx. 22%) and how battery storage enables a whole lot of wind and solar to come online.
	Q. Where in this plan is the battery on houses considered?
	A. Looked at as part of the modelling for the best future system, which looked at the further uptake of solar and battery on houses including different scenarios such as local batteries and different sizes of batteries. Hydrogen, different versions of gas fired power stations, and uptake of electric vehicles (including electric heavy vehicles by industry) were also considered in the modelling.
Slide 13	Q. Are there any public documents that we can look at around this?
Shuc 43	A. Yes, can send out the link to the online copies of the plan and happy to bring to the next meeting or mail out hardcopies.
	Action: DEPW to send out web links to the QEJP and SuperGrid Infrastructure Blueprint
	Tara further highlighted that the QEJP is architected around three key elements: infrastructure (building the SuperGrid of the future), supporting communities through the transformation, and supporting households, individuals, and small businesses to contribute to the energy transformation. An overview on the Queensland SuperGrid Infrastructure Blueprint was also provided, which sets out the optimal infrastructure pathway considered to deliver on the two renewable energy targets and modelling on wind, solar, storage capacity, and repurposing of existing coal assets.
	Q. The actual coal itself is still going to be mined and sent overseas? There is not the intention to stop coal mining.
	A. This is the plan about the electricty network and electricity generation and consumption, not about coal exports.
Slide 44-46	A summary of consultation activities completed and findings from the transmission questions in the community survey was briefly provided.
	Undergrounding is a key feedback raised by stakeholders and is being investigated; however, Col noted that underground corridors will be completely different to the overhead corridors as undergrounding of high voltage power requires flatter landscape conditions from an engineering perspective.



Agenda Item	Minutes and Actions
Slide 47-50	An overview of the three corridor options and sub-options to Woolooga and three corridor options to Tarong/Halys substation was provided including factors considered in the desktop assessment and how community feedback informed options identification. Corridor maps available to show those interested after the meeting.
	Q. What is the predominant tenure within each of the options – freehold, leasehold, National Park, State forest?
	A. Powerlink has tried to avoid as much as possible is national parks. For state forest, it depends on what is in the state forest and what impacts could occur. Some state forests up there can provide Powerlink with less impact compared to freehold. Usually you end up with a balance but most importantly Powerlink look at what is there over what the title is, keeping in mind that a lot of freehold land has infrastructure on it, so it just depends on the specifics of what is there. This is still the very early stage and Powerlink may go slightly off these corridors to avoid something that is high impact as Powerlink get into the grainer detail.
	Col highlighted the benefits and constraints of co-locating, which was regularly raised in community feedback received. Co-locating is beneficial in rural country where there are bigger lots of land but could be higher impact areas on smaller blocks of land due to location of property infrastructure and inability to mitigate as much due to physical constraints. Based on the count of land in each of the options, the two eastern options have ten times as many blocks of land that could be impacted compared to those two options.
Slide 51-53	Luke reiterated the need for a link from south to north and another link from east to west. Powerlink knows that there are small lots within the corridors and will not be building transmission lines over people's houses. In a perfect scenario, a horizontal separation by 500 m is ideal; however, if there is the need to go closer, Powerlink will most definitely look to mitigate and compensate for any additional disturbances.
	Inputs from community members and landowners will help inform which corridor will be the preferred corridor and Powerlink knows that no one wants a transmission line on their property. Powerlink has a sophisticated compensation modelling which is based on having an incentivised and negotiated position, rather than using compulsory acquisition powers.
	Q. Quite often in the past there has been confidentiality clause placed over people so that they cannot speak about the negotiation – this is viewed very negatively from the community.
	A. Powerlink does ask landowners not to discuss negotiations as they are confidential; however, do know that information does get out there. Powerlink does not want to be sharing information with the broader community that the individual does not want to share, but if the individual wants to share the information, Powerlink can't stop that individual.
	A. With transmission lines, there is quite a set framework for a head of claims. Our valuers go through their standards for head of claim and the property owner gets their own valuation as well that Powerlink will pay for. A lot of property owners use the same independent valuer and there is a level of independence and consistency amongst head of claims.
	Q. Confidentiality clauses on contracts makes people very uncomfortable.
	A. Powerlink will look into the wording of the clauses.
	Action: Powerlink to look into the wording in confidentiality clauses.
	Meeting Closed 1:45 pm
	(Discussion on National Park revocation process following completion of the meeting)