Appendix A2 A Submissions Register

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Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
1	1.1	Concern that studies on the Boggomoss snail were insufficient and do not provide enough justification to build the dam.	Don't build the dam.	N/A	Section 28.1.2
2	2.1	N/A	N/A	N/A	Section 1.2 of Appendix A2-B
3	3.1	N/A	N/A	N/A	Section 1.2 of Appendix A2-B
4	4.1	N/A	N/A	N/A	Section 1.2 of Appendix A2-B
5	5.1	N/A	N/A	N/A	Section 1.2 of Appendix A2-B
6	6.1	N/A	N/A	N/A	Section 1.2 of Appendix A2-B
7	7.1	Concern the planned location for construction camps will place more pressure on already congested roads and have a negative effect on public safety.	Build construction camps where recreation facilities are located.	2.4.6	2.3.1
8	8.1.1	The location of the pipeline in a major floodplain catchment area is likely to create extensive ongoing erosion.	Change the location of the pipeline to the southern side of the railway line and Warrego Highway on non-strategic cropping land and away from the broadband cable.	2.2.2	1.5.3 2.2.1 6.1 6.3
	8.1.2	The pipeline is also located on designated strategic cropping land (SCL) which will also be negatively affected by erosion.	Change the location of the pipeline to the southern side of the railway line and Warrego Highway on non-strategic cropping land and away from the broadband cable.	6.1.1	Section 1.5.3 Section 7.1.2
	8.1.3	The location of the pipeline is also likely cause disruptions to the existing National Broadband Network cable, Warrego highway and railway line.	Change the location of the pipeline to the southern side of the railway line and Warrego Highway on non-strategic cropping land and away from the broadband cable.	1.8	Section 1.4.1 Part C
	8.2	Concern regarding incorrect information. The cable is owned by Nextgen Networks and not Optus.	Contact Nextgen 'dial before you dig' to determine the exact location of the network cable between Dalby and Chinchilla.	2.2.2	Section 2.3
	8.3	Concern that they were not consulted as a relevant landholder.	Notify landowners.	2.2.2	Section 2.2.7 Section 24.4

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	8.4	The proposed clearing of vegetation for the access track will create erosion problems during flooding events and negate the soil conservation measures already implemented to deal with existing erosion.	Move the pipeline to an alternative location.	2.2.2	Section 2.2.1 Section 6.3
	8.5	The location of the pipeline is likely to create risk to farming equipment in terms of safety and damage. This would be exacerbated by erosion.	Move the pipeline to an alternative location.	2.3.2.1	Section 2.2.7 Section 6.3
	8.6	Concern that the risk of subsidence and bogging associated with back-filled cracking clay soil has not been properly evaluated. Erosion caused by stormwater and water associated with pipeline leaks pose a public safety risk.	Dig and properly evaluate test holes over an appropriate timeframe, including wet and periods of flooding. Consult with landowners to enable agricultural activities to continue and to minimise permanent alienation of strategic cropping land. Allow 2500 mm earth cover and extra compaction. Ensure the pipeline is engineered to withstand the weight of farming machinery and to allow for future machinery designs.	2.3.2.1	Section 2.2.7 Section 6.1, 6.2, 6.5
	8.7	Concern pipelines may move upwards over time due to the nature of the surrounding cracking clay soils.	Ensure pipelines are buried deep.	2.3.2.1	Section 2.2.7 Section 6.1,6.2,6.5
	8.8	Use of gravel is not necessarily a solution to erosion problems due to the volume and speed of flowing water in this area during flooding. Refer Issue 8.1.	Refer Issue 8.1.	2.3.3.1 2.4.5.2 2.5.5.2	Section 2.2.7 Section 6.1,6.2,6.5
	8.9	Concern about health and safety risks associated with pipeline maintenance activities.	Ensure that landholders are notified when inspections are scheduled.	2.5.5.2	Section 2.2.7 Section 29.9
	8.10	The decommissioning plan for the pipeline is inadequate.	The pipeline must be filled with appropriate slurry on decommissioning. Include as a requirement as a condition.	2.6.2	Part C
	8.11	The EIS has not considered the specific topographic and geomorphic information supplied to the project manager. (Attachment A)	Detailed consideration must be given to the topography and geomorphology of the Brigalow Jimbour Flood plain in respect to the pipeline.	4.3.2, 29	Section 2.2.4 Chapter 6 Chapter 29
	8.12	The residual risks relevant to topography and geomorphology are not acceptable and there is no information in the EIS as how they will be managed.	Identify risks and management strategies in the EIS.	4.4	Section 2.2.4 Chapter 6 Chapter 29
	8.13	Fossils have not been identified as occurring in the subsoil of the Jimbour Plain but have been found along Jimbour Creek.	Seek professional advice with respect to fossils found during pipeline excavation and act in accordance with this advice.	29	Section 29.3
	8.14	The location of the pipeline will create long term erosion issues. Refer Issue 8.1.	Move pipeline away from SCL to soils that are less subject to erosion.	6.2.2.2	Section 6.3

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	8.15	Access tracks and flow control valves will cause alienation of SCL. There will be a loss of productive land if affected landowners have to use alternative paths for farm machinery through productive land.	Locate the pipeline and access track away from areas used for cropping and locate the flow control valves on property or field boundaries.	6.2.2.2	Section 2.2.7.2
	8.16	Soil productivity will be affected by compaction caused by vehicles and soil disturbances associated with excavation during the construction and operation of the pipeline. Construction of the access track will cause alienation of SCL.	Recognise the long-term impact of pipeline construction and operation on cropping productivity. Move the pipeline to a non SCL area.	6.3	Section 6.4
	8.17	The pipeline easement will encroach on more private property than planned due to the location of the broadband cable. Refer Issue 8.1.3.	Complete a re-evaluation the of pipeline route east of Chinchilla.	7.3.1.7	Section 7.2.2 section 7.2.6
	8.18	The *Strategic Cropping Land Act 2011* has not been considered. As the coal mine in Macalister already has an established water supply no more coal mines should be built on strategic cropping land. Power stations located to the south of the Warrego Highway could be supplied by an alternative pipeline. The pipeline will not enhance agriculture in the region by not providing water to agriculture and alienation of SCL.	Conduct a proper analysis of the issue. Re-evaluate the pipeline route away from SCL.	7.2.2.1	Section 1.5.3 Section 7.1.2 Section 7.1.4
	8.19	The cumulative impact of other projects and activities on cropping productivity have not been considered.	Conduct a proper analysis of the issue. Re-evaluate the pipeline route.	7.2.2.2	Section 7.2.5
	8.20	New tracks will alienate SCL. Conversion of the road reserve into a track will accelerate erosion.	Refer Issue 8.19.	7.2.4	Section 1.5.3 Section 6.3 Section 7.1.2 Section 7.1.4 Section 7.2.2
	8.21	The proponent has not recognised that farmers will need to be able to cross the entire length of the pipeline with heavy agricultural machinery. Refer Issue 8.6.	Conduct a proper analysis of the issue. Re-evaluate the pipeline route. Engineer the pipeline to account for the heavy weight of farming machinery. Refer Issue 8.6.	7.3	Section 2.2.7.1 Section 7.2.3
	8.22	Need to conduct an analysis of the impact of the existing railway line on catchment flows.	Conduct a proper analysis of the issue. Re-evaluate the pipeline route.	14.1.7	Section 2.2.7.1 Section 7.2.3

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	8.23	Refer Issues 8.1.1, 8.1.2 and 8.1.8.	Refer Issues 8.1.1, 8.1.2 and 8.1.8.	14.2.1.2	Section 2.2.4 Chapter 6 Chapter 29
	8.24	The potential for erosion and subsidence caused by the location of the pipeline have not been adequately addressed in the EIS. Stating that the impacts on sediment-related and fluvial geomorphological processes will be negligible is incorrect.	Refer Issue 8.1.1.	14.6.3.2	Section 6.1 section 6.2 section 6.5
	8.25	Refer Issues 8.15 and 8.19.	Refer Issue 8.18.	14.7	Section 2.2.4 Section 6.2
	8.26	Concern regarding silting and contamination of Jimbour Creek associated with erosion caused by the position of the pipeline.	Refer Issue 8.18.	16.2.2.2	Chapter 6 section 16.7
	8.27	Concern that the impacts associated with the shrink-swell properties of cracking soils on the integrity of the pipeline including the potential for leaks and pipeline rupture have not been properly considered.	Refer Issue 8.18.	16.2.2.2	Chapter 6 section 16.7
	8.28	Need to provide more information in regards to the volume of dirty water being released from scouring and pigging (removal of sediment accumulations) to determine the level impact on erosion.	Provide more detail in the EIS.	16.2.2.2 16.2.4	Section 16.7.3
	8.29	The pipeline placement between Chinchilla and Dalby needs to be reconsidered and collocation opportunities also need to be considered.	Remove the Chinchilla-Dalby leg of the pipeline from the project. Conduct an analysis as a separate project at a later stage.	16.2.2.2	Section 2.2.1 Part C
	8.30	There will be economic impacts associated with the alienation of SCL and reduced productivity caused by erosion.	Conduct a proper assessment on the impact of erosion in the vicinity of Jimbour Creek. Remove the Chinchilla-Dalby leg of the pipeline and move the pipeline to another location.	25.3.2.5	Section 2.2 Section 6.3 Section 25.3.2 Section 25.3.3
	8.31	Heavy farm machinery impacts. Impacts will also affect the valuation of property due to access issues related to the pipeline. Refer Issues 8.21 and 41.26.	Refer Issues 8.21 and 41.26.	25.2.4.1	Section 2.2.7.1
	8.32	The pipeline will impact negatively on SCL. There is not enough demand to build the Chinchilla-Dalby leg of the pipeline.	Move the pipeline away from SCL and remove the Chinchilla-Dalby leg of the pipeline. Conduct an analysis of this leg of the pipeline in context of SCL.	25.4.2.1	Section 1.5 section 7.1.2 section 25.3.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	8.33	The hazard and risk assessment of the decommissioning of the pipeline has not been completed. Refer Issue 8.10.	Complete the assessment and relocate the pipeline to area that has less fragile soils.	26.4	Section 26.1
	8.34	The proponent has not stated any viable mitigation measures to deal with erosion. Refer Issue 8.1.1	See 8.1.1	29.9.4	Section 6.3
	8.35	There is no room to divert Jimbour Creek when flowing so the pipeline can be laid due to the proximity of the rail and road bridges.	Investigate the site and lay the pipe when the creek is not flowing.	29.9.6	Section 1.1 of Appendix A2-B
	8.36	The hazard risk assessment does not include an analysis of the risks of the pipeline on farming productivity, health and safety risks to farmers, SunWater employees and people living in these areas and theft and damage to property.	Ensure that SunWater employees have a blue card, property owners be notified when SunWater employees are entering their properties and consultation is conducted with landholders to determine when they are conducting farming activities.	29.10.3	Section 2.2.7.4 Section 29.11
	8.37	The full analysis of the erosion impacts and alienation of SCL have not been described in the EIS.	Conduct a proper analysis of the *Strategic Cropping Land Act 2012* and regulations. Conduct a proper analysis of the erosion impacts on the floodplain.	2.2.2	Section 6.3 Section 7.1.4
	8.38	Map 48 is missing a 'pink' area (highly restricted dominant remnant vegetation area) that contains endangered regional ecosystems, where the pipeline crosses Jimbour Creek. This area can be seen on the ecosystem map generated on the DERM website for their property.	Conduct a proper analysis of the vegetation management areas.	Appendix 10A 10	Part C - impact removed
9	9.1	N/A	N/A	N/A	
10	10.1	The area proposed to be flooded on the Dawson River and Cockatoo Creek riparian zone contains significant koala habitat. There is concern that the proposed offset to replant the riparian zone will not adequately offset the impacts on koala habitat.	Build a dam with smaller water storage capacity confined to the banks of the local watercourses.	1.5.8, 1.5.9	Section 28.1.1
	10.2	Concern regarding the impacts of dewatering the dam chimney filter on local groundwater levels in the aquifers in terms of availability of water to users who use this supply for watering stock and household, domestic and garden use. Management strategies to deal with these impacts have not been adequately identified.	Refer Issue 10.3.	1.5.13	Section 15.4.1.
	10.3	No mention of offset strategies to compensate for koala habitat losses.	Refer Issue 10.1 (identical).	1.5.26	28.1.1

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	10.4	Concern at the lack of consultation over the last 3 years. No advice about where the results of the public consultation process have been published.	Be more open and understanding to people affected by the project.	1.6	Section 24.4
11	11.1	Concern that the current proposed pipeline location will run through their property and that it will interfere with existing underground cables and pipelines.	Select alignment Option 3 - which runs straight from Wandoan to Dalby away from town as it is financially viable and less likely to interfere with housing and development in the area.	2.2.2	Section 2.2.1
12	12.1	Concern that vegetation loss associated with placement of the pipeline (location 1-6, attachment 1) will result in the loss of habitat (Brigalow dominated) and visual amenity on their property. The vegetation corridor at Location 4, attachment 1 is a major access route for machinery and livestock and contains a firebreak and underground stock watering pipeline. The alignment of the pipeline is also close to a proposed future dam (location 7, attachment 1).	Consider an alternative route for the pipeline (see attachment 1) along Graham, Auburn and Burnt Bridge Roads to the Warrego Highway.	2.2.2 (ES1.4.1.2)	Section 2.2.1 Part C
	12.2	Concern regarding the spread of weeds via vehicles and equipment entering the property during construction and maintenance phase of the pipeline.	Ensure that the vehicles and equipment used during these phases meet stringent clean down requirements.	29	Section 29.7
	12.3	The nature of soils in the area are likely to increase the time taken to construct and rehabilitate the pipeline during wet periods. This poses a risks to cattle, movement of machinery, maintenance of fire breaks and any future development on their property.	Fence the pipeline corridor from construction through to the rehabilitation phase and ensure that additional watering points, access gates and laneways are made available to allow for continued grazing in this area. Use cattle and kangaroo proof fencing.	2.2.2	Section 2.2.7.5
	12.4	Concern that the pipeline will affect stage 2 of the housing development on their property (see attachment 5) by reducing saleability.	Refer Issue 12.1.	2.2.2 (ES1.4.1.2)	Section 2.2.1 Part C
	12.5	Intrusion of the pipeline through SCL could be avoided by running the pipeline further to the north through poor quality land (see attachment 2 & 3).		2.2.2	Section 2.2.1 Section 7.1.4 Part C
13	13.1	There is not enough evidence to confirm the impacts of the dam on the environment, particularly those of national significance (e.g. Taroom wetlands, remnant vegetation and boggomoss snail populations).	Normal environmental construction and operating conditions to be enforced by the State Government.	9.3, 28	Section 9.1.1
	13.2	There is an opportunity to build a tourist facility to educate people regarding the use of fishways.	Project to include a specific tourist/educational facility incorporated into the fishway design. This could include a glass case tunnel for fish viewing and underwater cameras.	24.4.5	Section 24.5

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	13.3	There may be limited local business opportunities during the construction phase.	Proponent to prepare a strategy that enables and encourages the use of local businesses and suppliers. This strategy is to be approved by BSC and implemented throughout the life of the project.	24.5.2.1	Section 25.4.5
	13.4	There is insufficient evidence to confirm whether the construction of the dam during periods of drought would adversely impact on downstream Dawson River catchment users.	Revise hydrology and Water Resources Plan.	14.2.1	Section 14.1.4.3
	13.5	There is concern that the dam water will be taken from the Dawson/Callide catchment for the benefit of other areas without first ensuring adequate water for the Dawson catchment.	Secure water allocations for the Dawson catchment as follows: ▪ secure current water allocations ▪ additional medium priority water secured for agriculture ▪ additional high priority water secured for urban purposes.	14.1.6.3	Section 14.1.4.4
	13.6	The cost of water to downstream users should exclude the cost of the pipeline.		1.6	Section 1.6.1
	13.7	Concern that the ponded area of the dam will pressurise existing bores and impact the Hutton aquifer.	Provide a management plan that addresses the resultant impacts and publically shares monitoring information via an internet based application.	29	Section 29.4
	13.8	Concern the dam will result in the loss of valuable farming land (by dam ponded area and land used for offsets) and impact on food security and economic base of the shire.	Provide compensation for the loss of agricultural land through additional allocation of water from the dam for farming purposes in the Dawson Valley.	14.2.2.1	Section 25.3
	13.9	The dam will have impacts on the local road network. In addition to the roads suggested for upgrade in the EIS there is a need to raise the Stony Crossing and to identify other sites that require upgrades.	Prior to commencement of any significant construction works provide BSC with a detailed traffic report (local roads) which is to be used as the basis for a Road Infrastructure Agreement between SunWater and BSC. The report is to include: ▪ road impact assessment ▪ road use management plan ▪ maintenance program for all impacted BSC roads.	7.1.2.5, 21	Section 7.4.1
	13.10	There is a need for a heavy vehicle bypass of the Taroom urban area as a result of cumulative impacts of resource projects (noise, safety and amenity).	Incorporate the Taroom heavy vehicle bypass into the project.	21	Section 21.2.2

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	13.11	Concern regarding the cumulative impacts of resource projects on the standard and condition of the main roads in Banana Shire, particularly the Dawson and Leichhardt Highways.	Projects to contribute to road upgrades through financial contributions or return revenues from the State and Commonwealth governments. Road upgrades should include: ▪ additional upgrade and maintenance ▪ Taroom heavy vehicle bypass ▪ intersection upgrade at Dawson and Leichhardt highways ▪ additional rest areas and passing opportunities.	21	Section 21.2.2
	13.12	Need to develop and implement a pest and weed management plan for the pre and post-construction phases of the project. There is also concern of increased midge impacts in Taroom that need to be managed.	Develop a pest and weed management strategy and plan to be approved by BSC.	29	Section 29.7
	13.13	The dam will not have a significant flood protection role for downstream areas.	Provide BSC with a revised Q100 flood level report for the dam upstream.	14.1.5	Section 14.2
	13.14	Pipeline alignments need to be amended to coincide with other linear infrastructure corridors to minimise impacts on farming land and the environment and to improve accessibility for maintenance.	Where practical coincide pipeline alignment with existing linear infrastructure such as the gas, rail or main road corridors.	2.2.2	Section 1.4.1 Section 2.2
	13.15	Development of recreational facilities on land adjacent to the dam to facilitate future opportunities and partnerships.	Develop day picnic and camping facilities on freehold title land. Facilities to include: ▪ powered camp sites ▪ toilets ▪ boat ramp ▪ all weather access.	24.5.6.1	Section 24.5
	13.16	Concern regarding the social impacts of the construction camp and safety concerns about drive up starts. There is conflict between statements in the EIS.	Adopt the following: ▪ self-contained construction camps ▪ bus-in/bus-out to airports ▪ onsite security with no interaction with local communities ▪ appropriate management arrangements.	2.4.6	Section 2.3.1
	13.17	There is a need for a complaints management system.	Implement a community engagement and complaints system to ensure that BSC does not have to deal with complaint issues. This should include: ▪ a single point of contact ▪ a project officer in Taroom close to the project and impacted area.	24.9	Section 24.4
	13.18	BSC systems (waste, water supply, sewerage, airport) do not have the capacity to deal with short term projects of this nature.	Obtain prior written consent from BSC to gain permission to access BSC water supply, waste facilities, sewer infrastructure and aerodromes.	20.2	Section 20.3

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	13.19	The proposed environmental offset strategies increase the amount of agricultural land removed from production.		10.4, 24.5	Section 25.4.3
	13.20	Need to implement more appropriate revenue sharing arrangements to lessen the impact on local communities that are already under pressure.	Local government and business compensation should include: ▪ subsidised water allocations for Dawson and Callide Valley agriculture and urban purposes; ▪ replacement of the Glebe weir day picnic and camping facility; ▪ reinstatement of local authority infrastructure subsidies; ▪ improvement of local roads in the affected area; ▪ adequate management of pest and weed impacts; ▪ appropriate environmental offset projects within the local area.	14.2.2.1	Section 25.4.2
	13.21	Land acquisitions for the dam have not been finalised.	Government to finalise land acquisitions.	2.4.1.1, 24.5.1	Appendix A2-B Section 1.1
	13.22	The development of the dam will cause BSC to lose rateable income in excess of $100,000 p.a. The loss of finances associated with this is likely to affect services in this area.	BSC to request for an equivalent payment to offset the loss.	2	Section 25.4.2
	13.23	Consultation with adjacent regional council.	Contact should be made with the Western Downs Regional Council (WDRC) to share information and views on the project.	General	Chapter 24
	13.24	The EIS has been referred internally along with a copy of the report outline with request for comments. Limited feedback has been received. There was also a meeting with Taroom District Development Association regarding this report.		N/A	Appendix A2-B Section 1.1
	13.25	The community would like to confirm that the local fish stocking group will be able to access the dam to continue restocking waterways in the area.	The Taroom fish stocking group is allowed access to the dam for fish stocking purposes.	13.1.3.3	Section 13.3
	13.26	The EIS has not clearly identified who will be funding and managing the dam. There will be concern from BSC and community if the dam is not publicly owned or managed for the benefit of the whole community.		2	Section 1.1 Section 25.2
14	14.1	Concern the affected Indigenous people of the Dawson Valley have not been properly consulted	Consult widely and meaningfully with the Aboriginal nations affected by this proposal, including the descendants of the persons buried at the Bundalla Mission. Extend the consultation period by two months to enable Aboriginal people to adequately participate.	1.5.20 and Chapter 22	Section 22.1 Chapter 24.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	14.2	The area that is proposed to be inundated will flood areas of cultural significance including burial grounds, artefacts, trade routes, song lines, sacred places, massacre sites, women's places, bora grounds and scar trees. Only 46 of the 268 grave sites have been identified and SunWater should consult with descendants to determine the location of the other sites that are yet to be identified. Scar trees will be endangered by the rising water table, changed soil conditions and increased periods of inundation created by the dam.	Create a flood-proof barrier to the cemetery area at Bundalla Mission. Alternatively lower the dam to the 170 m contour level to reduce damage to areas with cultural significance and prevent flooding of the grave site. Ensure that the dam does not encroach on the scar trees. Conduct a comprehensive archaeological survey of the aboriginal cultural heritage of the Dawson Valley, with particular emphasis on the entire area to be impacted by the dam. Provide funding for a 'keeping place' at Taroom to store and display appropriate aboriginal cultural heritage artefacts.	1.5.20 and Chapter 22	Section 22.2 Chapter 22.3 Chapter 22.4
	14.3	The EIS does not make reference to the 'Davies Cultural Heritage Report' which defines the areas with specific cultural and spiritual significance that are threatened by development of the dam. There is concern that there is lack of cultural knowledge by government agencies in regards to special places.	Respond comprehensively to the previous cultural heritage studies referenced by Sue Davies's Cultural Heritage reports. Implement the major recommendations of the Davies report i.e. no dam and protect the boggomosses. Office of the Coordinator-General to review the Davies Report.	1.5.20 and Chapter 22	Chapter 22.5 Chapter 22.6 Chapter 22.7
	14.4	SunWater has failed to explain the objections of the majority Iman and Wulli Wulli people to this dam in the EIS. CHMPs do not address the spirit and the connection to the country and ancestors that will be destroyed by inundation.	Develop separate cultural heritage management plans (CHMPs) for the Bundulla, Boggomosses, Palm Tree Creek and Cockatoo Creek areas.	1.5.20 and Chapter 22	Chapter 22.8
	14.5	Early meetings with Aboriginal people appear to be selective and did not represent the whole picture of the project including the details of the Davies report and new dam arrangements. There is also concern that the fast-tracking process for the project has not allowed sufficient time to actively participate and to incorporate information received from community meetings on the Indigenous land use agreements (ILUAs) that are to be held in August 2012.		1.5.20 and Chapter 22	Chapter 22.9
	14.6	Need to look at alternatives to building the dam. Dalby's water supplies would appear to be better resourced by a 70 km long pipeline connecting to Toowoomba and the SEQ Water Grid rather than a 240 km pipeline from the Dawson.	Do not build the dam. Need to build better relationships between miners and coal seam gas (CSG) companies regarding the use of CSG water as an alternative water supply. Connect Dalby to the SEQ Water Grid.	1	Section 1.3
	14.7	Concern regarding the negative impacts of the dam on the Boggomoss Snail, Dawson River turtle, fish (including Bony Bream) and flora and fauna of the Dawson River.		ES, 10-13	Appendix A2-B Section 1.2

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	14.8	Concern regarding public health issues including mosquito borne diseases associated with the development of the dam.		29	Section 13.9 Section 29.7
15	15.1	The population estimates from the Boggomoss Snail surveys conducted by SKM (2009) and JKR-SKM (2010) have been overestimated due to the nature of these surveys being based on general habitat and not available microhabitat. This overestimation will have an negative impact on conservation measures and may impact on the application of long-term monitoring programmes that form part of the relocation strategy.	The proponent needs to conduct an additional survey prior to any relocation and preferably in the wetter months of the year when the snail is active. The survey needs to be based on available micro-habitat rather than general habitat.	11	Section 28.1.2
16	16.1	Refer Issue 14.1 (identical)	Refer Issue 14.1 (identical)	1.5.20 and Chapter 22	Section 1.3 Section 13.9 Section 22 Section 24 Section 29
17	17.1	Significant environmental impacts on the: ▪ Taroom wetlands (national significance); ▪ remnant vegetation communities and related ecosystems (including flora and fauna). Refer Issue 13.1.	Refer Issue 13.1.	9.3	Section 9.1.1
	17.2	There is an opportunity to build a tourist facility to educate people regarding the use of fishway ladders.		24.4.5	Section 24.5
	17.3	There is a day picnic and camping facility at Glebe Weir and that should be replaced in the new project. Refer Issue 13.15.	The replacement facilities should be developed by the proponent on freehold title to facilitate future commercial opportunities and partnerships. This should include: ▪ Powered camp sites ▪ Toilets and showers ▪ Boat ramp ▪ All weather access. ▪ Viewing access from both the north and south sides of the wall ▪ Resources to facilitate and encourage youth activities.	24.5.6.1	Section 24.5

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	17.4	The TDDA would like to confirm that the local fish stocking group will be able to access the dam to continue restock the area waterways (including the proposed dam). Refer Issue 13.25.	Refer Issue 13.25.	13.1.3.3	Section 13.3
	17.5	There will be limited social and economic impact during the construction or operational phases. It is likely that the loss of farming economic activity will occur and some of this will be replaced by dam maintenance workforce. The TDDA is concerned there may be limited local business opportunities during the construction phase. Refer Issue 13.3.	Refer Issue 13.3.	24.5	Section 25.4.5
	17.6	The TDDA is concerned that the dam will not be a reliable source of water given extended periods of drought experienced in the early 2000s. With the dam in place these drought events will increase the potential for downstream users to be adversely impacted by reduced water supply. Refer Issue 13.4.	Refer Issue 13.4.	14.2.2	Section 14.1.4.3
	17.7	The TDDA is concerned that Nathan Dam water will be taken from the Dawson for the benefit of other areas and catchments without first ensuring adequate Dawson catchment supply. Refer Issue 13.5.	The TDDA suggest there is a need to secure water allocations for the Dawson catchment as follows: ▪ secure current water allocations; ▪ additional medium priority water secured for agriculture; ▪ additional high priority water secured for urban, commercial, industrial and agricultural purposes.	14.1.6.3	Section 14.1.4.4
	17.8	There has been a concern that the cost of the downstream water will include the cost of the pipelines that transfer water out of the catchment. Refer Issue 13.6.	This should be included in the submission to ensure appropriate user pays principle is employed.	14.2.2	Section 1.6.1
	17.9	The TDDA is concerned that the ponded area of the dam will pressurise existing bores in the area and impact on the Hutton aquifer. Refer Issue 13.7	The proponent should provide a management plan to address the resultant impacts and publically share the monitoring information via an internet based application.	29	Section 29.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	17.10	Concern the dam will result in the loss of valuable farming land (by dam ponded area and land used for offsets) and impact on food security and economic base of the shire. Refer Issue 13.8.	The loss of farming land could be compensated for with the allocation of additional water from the dam for Dawson Valley farming purposes.	14.2.2.1	Section 25.3
	17.11	There will be impacts on the local road network. Refer Issue 13.9.	Proponent to note Stony Crossing as a major stock route used to access the Taroom clearing dip. Incorporate a development condition in a similar manner to the gas pipelines and Surat Basin Rail projects be implemented.	7.1.2.5	Section 7.3.2 Section 7.4.1
	17.12	As a result of the cumulative impacts of resource projects within the region, there is a need for a heavy vehicle bypass of the Taroom urban area. Impacts and issues relate to safety, noise and amenity of Taroom residents. Refer Issue 13.10.	Incorporate the Taroom heavy vehicle bypass into this project.	21	Section 21.2..2
	17.13	Cumulative impacts of multiple projects on the condition of main roads in Taroom. Refer Issue 13.11.	Projects proponents should contribute to upgrading these roads. This should include: ▪ additional road upgrades and maintenance; ▪ Taroom heavy vehicle bypass; ▪ additional rest areas and passing opportunities. ▪ upgrade the corner of Leichhardt Hwy and Cromwell St intersection.	21	Section 21.2.2
	17.14	Need to develop and implement a pest and weed management plan for the pre and post construction periods including the pests such as midges. Refer Issue 13.12.	Refer Issue 13.12.	29	Section 29.7
	17.15	Concern regarding future flooding impacts of the dam on Taroom and surrounding area. Refer Issue 13.13.	Refer Issue 13.13.	14.1.5	Section 14.2.2
	17.16	Pipelines alignment should coincide with existing linear infrastructure (e.g. gas, power, rail or main road corridors). Existing infrastructure already detrimental to farming activities and needs logically planned outcomes. Refer Issue 13.14.	Refer Issue 13.14.	2.2.2	Section 1.4.1 Section 2.2 Section 2.3

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	17.17	Concern about the social impacts of the construction camp as well as safety concerns about drive up starts.	Construction camps from other projects have adopted the following approaches: ▪ construction camps are self contained; ▪ bus-in/bus-out from airports; ▪ on site security with no interaction with the local communities; ▪ appropriate management arrangements.	2.4.6	Section 2.3.1
	17.18	There is a need for an appropriate complaints management system.	Include: ▪ a single, point of contact; ▪ a project officer in Taroom, close to the project and impacts.	29	Section 24.4
	17.19	There will be negative economic impact associated with loss of rural land. Refer Issue 13.19.	Compensate the loss of remnant vegetation as part of the environmental offset strategy.	10.4, 24.5	Section 25.4.3
	17.20	Require more equitable sharing of resource revenues from the governments to local authorities and businesses to deal with the increased financial costs on local community. Refer Issue 13.20.	Compensation could include: ▪ subsidised water allocations for Dawson and Callide Valley agriculture and urban purposes; ▪ the provision of a replacement of the Glebe Weir day picnic and camping facility; ▪ reinstate local authority infrastructure subsidies; ▪ improved local roads in the affected area; ▪ adequate management of pest and weeds; ▪ appropriate environmental offset projects within the local area.	14.2.2.1	Section 25.4
	17.21	The land acquisitions for the dam have not been finalised leaving some landowners without a clear direction. Refer Issue 13.21.	Finalise land acquisitions.	2.4.1.1, 24.5.1	Appendix A2-B Section 1.1
	17.22	It is unclear who will fund and manage the dam in the EIS. This would raise community concern if it is not publicly-owned and managed for the benefit of the whole community. Refer Issue 13.26.	Refer Issue 13.26.	2	Section 1.1 Section 25.2
18	18.1	Refer Issue 14.1 (identical).	Refer Issue 14.1 (identical).	ES1.5.20 and Chapter 22	Section 1.3, 13.9, 22,24,29 Appendix A2-B Section 1.2
19	19.1	Refer Issue 14.1 (identical).	Refer Issue 14.1 (identical).	ES1.5.20 and Chapter 22	Section 1.3, 13.9, 22,24,29 Appendix A2-B Section 1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
20	20.1	This project was considered prior to the inclusion of the Skills Queensland Workforce Profile Criteria in the ToRs.	Recommend future progress reports include the completion of the data template provided on Skills Queensland's website www.skills.qld.com.au/functions/significantprojects	24.5.10, Table 24 – 45	Section 24.1
21	21.1	The accommodation camp near Taroom will impact on the family atmosphere of Taroom due to increases in traffic, lighting impacts and noise.	Build the construction camp where the recreation area has been proposed to allow use by tourism and recreational users of the dam.	24.5.5.1	Section 2.3.1 Section 24.7
	21.2	The people of Taroom and Banana shire need to be included in the consultation process.		N/A	Section 24.4
22	22.1	Refer Issue 14.1 (identical).	Refer Issue 14.1 (identical).	1.5.20, 22	Section 1.3, 13.9, 22,24,29 Appendix A2-B Section 1.2
23	23.1	EIS does not mention how many workers will be housed in the construction camps.	Include in the EIS how many workers will be housed in the camps.	2.4.6, 24.5.5.1	Section 2.3.1 Section 24.7
	23.2	The camp will increase noise, traffic and crime impacts and impact on the country atmosphere of Taroom.	Ensure the camps are as far away as viable from the Taroom township.	2.4.6, 24.5.5.1	Section 2.3.1 Section 24.7
24	24.1	Workforce camp location.	Situate the camps near the dam construction site and then use the area for recreational purposes after the dam is built.	2.4.6, 24.5.5.1	Section 2.3.1 Section 24.7
	24.2	Camps will impact on road traffic in Taroom.	No traffic on the road during school bus times between 7:30-8:30 am.	2.4.6, 24.5.5.1	Chapter 21
25	25.1	The BOM reading (AHD 180.82) is different to the EIS reference (181.5 m AHD) for the elevation level at Stoney Crossing.	Entire documents should be checked for accurate levels.	14	Section 14.2.2
	25.2	In 2010/2011 several flood events resulted in at least: • 8 residences being evacuated as they were uninhabitable; • several businesses including the town's only Hotel with its accommodation units, the only caravan park and the only cabin accommodation were flooded. This involves the majority of the town's accommodation; • flooding of one of the two service stations and Landmark.	Modelling should be done on 2010/2011 floods levels being repeated when the dam is at full capacity 183.5 AHD. The dam should not proceed until a flood levee is designed to protect Taroom.	14	Section 14.2.2
	25.3	The EIS states "Two residences in Taroom are located between FSL and the Q100 flood level and will not be habitable, as they will no longer meet housing safety criteria.	The project EIS should clearly state the formulae and process for compensating affected landowners including how easements will impact on households.	14	Section 14.3
	25.4	Concern how inundation of the dam will be managed when mines stop operations during flood events and future management after mine closure when there is no demand.	The dam should be redesigned to include flood gates for flood events and for when future management requires release of water beyond the capacity of the current design.	14	Section 14.2.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	25.5	Concern about compensation in the event of flooding caused by the dam.	Ensure flood modelling is accurate and consider landholder compensation measures in the event of flooding caused by the dam.	14	Section 14.3
	25.6	Given that in a 1 in 100 AEP event the difference in peak water level pre and post-dam is +0.6m, flooding will become more of an issue around the Taroom township in a major flood.	The FSL should not exceed the normal standing water level at the Stoney Crossing.	14	Section 14.2.2
26	26.1	The *Strategic Cropping Land Act 2011* has not been considered. The pipeline and access track will cause permanent alienation of SCL.	Make reference to the SCL Act and locate the pipeline on non-SCL that traverses the area of its target market.	6.2.2.2 (1.11.1.1)	Section 1.5.3.3
	26.2	Concern that not all relevant landowners were consulted in regards to the combined impacts of the pipeline and broadband cable.	Consult all owners.	2.2.2	Section 24.4
	26.3	Concern that landowners were not made aware of the access track during consultation. Concern that the access track would exacerbate impacts of erosion in this area.	Move pipeline to an alternative location.	2.2.2	Section 2.2.1 section 2.2.7 Part C
	26.4	Concern the pipeline will not have the capacity to deal with the weight of farm machinery. Refer Issues 8.6 and 8.7	Refer Issue 8.6. Also ensure compensation to landowners if damage to machinery occurs as a result of the pipeline.	2.3.2.1	Section 2.2.7.1
	26.5	The access path will alienate SCL and payment of compensation will not be enough to offset the impacts associated with the loss of productive land.	Conduct a proper analysis of this issue and re-evaluate the pipeline route.	7.2.2.2	Section 1.5.3 Section 7.2.2
	26.6	The cumulative impact of other projects in combination with this project on productive land capacity have not been adequately considered.	Conduct a proper analysis of this issue and re-evaluate the pipeline route.	27	Section 7.2 Section 7.3 Section 27.2
	26.7	Map 48 does not match the ecosystem map generated on the DERM vegetation mapping site for their property. There is a section of dominant and essential habitat missing. Refer Issue 8.38.	Refer Issue 8.38.	Appendix 10A	Part C - Impact removed
	26.8	Refer Issue 8.21.	Refer Issue 8.21.	2.3.2, 7.3	Section 2.2.7.1 Section 7.2.3
27.2	27.2.1	Water trading in the Fitzroy system is already operating and as expected moving to higher paying customers. Given the existing availability of tradable water it seems improbable to use Dawson River water at Blackwater.	Remove this option from any material additional to the EIS.	1.3.2.1	Section 14.1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	27.2.2	Potential water use for agricultural allocation has not been adequately considered. This could include water during periods when mine users are not using water from the dam.	Reconsider the use of water from the dam for agriculture. Ensure that the minimum allocation for this use is proportional to the amount set aside from the Connors River Dam.	1.3.2.2	Sections 1.6.1, 7.2.5, 25.3.5.1 and Appendix B-14.
	27.2.3	Concern that the conditions under which existing water harvesting will be conducted provide no certainty that supplementary supply will be available to agricultural users.	Allocation is to be provided to agricultural users so that there is a guarantee that productivity from irrigated agriculture will not be reduced.	1.3.3	Sections 1.6.1, 7.2.5, 25.3.5.1 and Appendix B-14.
	27.2.4	Agricultural users again need to be considered.	Consider agricultural users to allow for financial return during water sitting periods, when not being used by other users.	1.7.3	Sections 1.6.1, 7.2.5, 25.3.5.1 and Appendix B-14.
	27.2.5	Concern that examination of the cumulative impacts of other projects in the area including the Glebe Weir raising, the pipeline to Wandoan Coal Project and the pipelines for the Surat Dawson Project have not been adequately considered in the EIS (Chapter 1 or 27).		1.7.3, 27	Section 1.4.2 Section 27.3
	27.2.6	The inundation area includes land that could be classified as SCL.	Ensure the project complies with the *Strategic Cropping Land Act 2011*.	6.1.4.2, Figure 6.5 and Table 6.8	Section 1.5.3 Section 7.1.2
	27.2.7	Section 1.3.1 of the EIS indicates that there will be an adverse impact on existing agricultural production downstream.	Provide allocation of water resources for agricultural use as a compensation/mitigation strategy for changes to the water harvesting regime. (See Connors River Dam project)	7.2.1.2 7.2.1.5 14.2.2.3 24.5.3.2	Section 1.6.1 Section 7.2.4 Section 14.3
	27.2.8	The location of pipeline has been proposed along the northern side of the rail line which is an area known to be subjected to flooding.	Design the pipeline to follow the southern side of the railway line from pump station 4.	2.2.2	Section 2.2.1 and Part C Section 2.3.2.
	27.2.9	Spread of weeds by vehicles.	Ensure contractors use wash down bays, especially on the way back onto site after using their vehicles on the weekend or time off.	29.9.13	Section 29.7
	27.2.10	The EIS states the overall project is unlikely to have a significant impact on tourism in the region.	Need to identify recreational and tourism opportunities. (See Cania and Fairbairn Dams).	25.2.3.5	Appendix A2-B Section 1.1
	27.2.11	The ToRs for two coal mine resource projects in the area have been recently released.	Extend the cumulative impacts chapter in the AEIS to include the interrelationship of accumulated activities from the Taroom Coal and the Collingwood projects with other projects already noted in the EIS.	27.1.1	Section 27.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
27.3	27.3.1	The tool used to provide an analysis of the economic impacts of constructing the project (input-output analysis) is likely to significantly overstate the regional economic impacts. EPRB has an in-house regional CGE model ' The Enormous Regional Model (TERM)' that can be used to assess the regional impacts of the project more accurately.	Use a regional computable general equilibrium model (CGE) to assess the regional impacts of constructing the project.	25	Section 25.7
	27.3.2	The economic analysis does not capture the operational and supply chain benefits of the Nathan Dam and Pipeline. This may require a wider scope.	Need to re-examine the appraisal methodology to determine whether an alternative economic method such as economic cost-benefit analysis (ECBA) would be more appropriate for estimating longer term net economic benefits of the project.	25	Chapter 25
27.4	27.4.1	The EIS adequately addresses local industry policy requirements.	No changes required.	25.4.3	Appendix A2-B Section 1.2
	27.4.2	The department is incorrectly referred to as the 'Department of Tourism, Regional Development and Industry'.	Replace references with 'Department of State Development, Infrastructure and Planning.	General	Appendix A2-B Section 2.2
27.5	27.5.1	The EIS does not address the overall loss to agricultural productivity and dismisses the potential to contribute to agricultural productivity.	Provide greater acknowledgement of the losses of cropping and good quality agricultural land and look into ways in which the project could provide long term benefits to agricultural productivity.	General	Section 7.2.
	27.5.2	Irrigators that are water harvesters with medium to high flow threshold will experience decreased water availability and may reduce land use downstream.	Conduct a further economic analysis to understand the losses and to address the loss of productivity.	25, 7.2.1.2	Section 25.3.5
	27.5.3	In table 7-15 SunWater has only the discussed negotiations between land owners and DERM for purchase of part or whole properties.	Note that growers are losing the most productive parts of their properties and in some cases irrigated land. Ensure that they are properly compensated for these losses.	7.2.2.2, 25	Section 7.2.2, 25.3.1. Section 25.4.3
	27.5.4	Loss of SCL and enactment of the *Strategic Cropping Land Act 2011* and mitigation for permanent alienation of SCL.	Note that cropping land will be lost as a result of flooding, including land designated as SCL. Provide a discussion on how the loss of SCL will be mitigated.	7.2.2.2	Section 7.1.2 Section 7.1.4
	27.5.5	The EIS dismisses the potential for use by agricultural users due to price sensitivity.	Address the commercial viability of agriculture as water user.	25.2.8.1	Section 25.3.4
27.6	27.6.1	Summary of the *Forestry Act 1959.*	Amend the summary to read ' provides for forest reservations, the management of silvicultural treatment and protection of State forests, and the sale and disposal of forest products and quarry material, that are property of the State on State forests and timber reserves and on other state lands.'	10.1.1.2	Section 1.5.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	27.6.2	Access to State lands across freehold lands under the *Forestry Act 1959*. Timber quantities stated seem optimistic.	Provide access for relevant DAFF officers to assess timber resources in the inundation area, pipeline alignment and associated infrastructure and plan for extraction well prior to construction commencing. Identify opportunities to harvest timber in association to cleared vegetation where viable and develop a Vegetation Clearance Management Plan. Where timber products are not salvaged prior to inundation provide compensation to Forest Products DAFF as determined by the Chief Executive.	10.1.3.11	Section 1.5.2
	27.6.3	State ownership of quarry material under the *Forestry Act 1959*. Some of the proposed sources of quarry material including the Gwambagwine and hanging rock pit are State resources that require a Sales Permit under the *Forestry Act 1959* to access.	Contact Forest Products DAFF and provide the location of the proposed clay borrow pits to ascertain ownership of quarry material and where relevant seek required approvals under the *Forestry Act 1959*.	General	Section 1.5.2
27.7	27.7.1	The Employment Initiatives (EI) unit would like to assist in developing workforce and employment strategies for the SIMP.		N/A	Appendix A2-B Section 1.2
	27.7.2	Unemployment rates outlined in 24.5.2.1	Department of Aboriginal and Torres Strait Islander and Multicultural Affairs to provide detailed comments on the Indigenous employment matters on behalf of EI.	24.5.2.1	Section 24.2
	27.7.3	Incorrect reference to 'DEEDI, Employment and Indigenous Initiatives Division'.	Replace references with 'Employment Initiatives Division, Department of Education, Training and Employment'.	General	Appendix A2-B Section 2.2
27.8	27.8.1	Figure 7-7, mining tenements dam and surrounds.	Update figure 7-7 to reflect the current status of all exploration permits for both coal and minerals.	7.1.2.5	Section 7.3.1
	27.8.2	Figure 7-20 Mining leases - pipeline	Update figures to reflect the current status of mining leases, exploration permits for minerals, coal and petroleum.	7.2.2.3	Section 7.3.1
	27.8.3	Figure 7-21 A,B,C tenements - pipeline	Update the map to reflect the new granted petroleum pipelines.	7.2.2.3	Section 7.3.1
27.9	27.9.1	The habitat between Gyranda Weir and Taroom (including some of Glebe Weir Pool) is considered high quality and highly productive fish habitat. Concern that the inundation area will flood an additional 40km of this habitat area.	Provide offsets for this loss in terms of biodiversity and fisheries resources. These offsets may be a requirement for a development approval for works under the *Fisheries Act 1994*.	1, 13.4	Section 13.8
	27.9.2	There is no reference to waterway barrier works approval requirement under the *Fisheries Act 1994* for the dam and pipeline crossings.	Become familiar with the approval requirements of the project under the *Fisheries Act 1994*.	1.11.1.2	Section 1.5.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	27.9.3	The location and design of the dam should take into account the constraints imposed by the requirement for safe fish passage both up and downstream.	Work with Fisheries Queensland to develop an acceptable design. Include Fisheries in the technical review panel and process for the preliminary design of the dam and spillway. Ensure implementation is aligned to the 'Fish Passage Design and Implementation Process Criteria'. See attachment.	2.3.1.7	Section 2.1.2 and Section 13.4.
	27.9.4	There is risk of inter-basin transfer of noxious and non-indigenous flora and fauna between the Fitzroy and Murray-Darling basins. Fisheries is happy to provide advice on proposed management procedures and infrastructure to meet the requirements of the *Fisheries Act 1994*.	Provided more detail on how the risk of inter-basin transfer will be mitigated including design, operation and location of infrastructure and how water will be managed and disposed of along the pipeline and point of delivery.	13, 29.9.11	Section 13.1 and 13.2 Section 13.1 and 13.2
	27.9.5	SunWater will require a development approval (s76, *Fisheries Act 1994*) or adherence to a relevant code to provide fish passage where road crossings across the waterway are constructed or upgraded.	Early consultation with Fisheries to identify sites that require appropriate designs for fish passage. Fisheries happy to assist with options that simplify the approval process.	2.2.3.1	Section 2.1.2 Section 13.4
	27.9.6	Extraction of in-stream sand may impact on fish habitat including use and passage.	Provide detail on how extraction of sand is likely to affect fish and fish habitat and how these impacts will be managed.	2.2.3.2	Section 2.2.3 Section 13.4
	27.9.7	The current location of the fishway and outlet works in relation to the spillway are not supported by Fisheries.	Consult Fisheries to assist in the development of an acceptable design.	2.3.1.7	Section 2.1.2 Section 13.4
	27.9.8	Screens of small aperture to screen out small bodies and juvenile fish will require a high level of ongoing maintenance.	Provide details on how maintenance including the costs will be maintained throughout the life of the dam - e.g. screen cleaning, fishway repairs and parts replacement, flood damage repairs etc.	2.3.1.7	Section 2.1.3
	27.9.9	No discussions with Fisheries have been conducted regarding the design of the Nathan Dam fishway.	Consult Fisheries to further develop an acceptable design in accordance with the Fish Passage Design and Implementation Process Criteria (See attachment).	2.3.1.7	Section 2.1.2
	27.9.10	Concern regarding the exposure of buried pipelines during flooding events (as seen in Brisbane flood events) may act as a barrier to the passage of fish.	Demonstrate how erosion and exposure of the underground pipeline within stream beds will not occur during the life of the pipeline. Provide this information to Fisheries.	2.3.2 2.4.3.2 Table 14-60	Section 2.2.6
	27.9.11	Bridges are the preferred stream crossing option. Culvert crossings and low level crossings will need to allow for fish passage.	Consult Fisheries early to identify whether pipeline sites are on waterways and to develop an appropriate design for the fish passage. Fisheries happy to assist with options that simplify the approval process.	2.3.3.1, 29.9.18	Section 2.1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	27.9.12	There is potential for partially dismantled Glebe Weir to trap fish during low water levels.	Consult Fisheries to confirm the decommissioning process for Glebe Weir will not negatively impact on fish.	2.3.3.6	Section 2.1.5
	27.9.13	Potential for fish to be entrained by water supply intakes.	Provide detail about screening procedures and design of intakes that will prevent fish from being entrained.	2.4.1.2	Section 2.1.3
	27.9.14	Diversion works during dam construction need to ensure adequate fish passage as a development approval requirement under the *Fisheries Act 1994.*	Consult fisheries to further develop an acceptable design as part of the fish passage design and implementation process (see attachment).	2.4.2.2, 29.9.6	Section 2.1.2
	27.9.15	There is risk of the translocation of noxious and non-indigenous fish and aquatic flora and fauna between the Fitzroy and Murray-Darling basins through construction and water supplies. Fisheries is happy to provide advice on proposed management procedures and infrastructure to meet the requirements of the *Fisheries Act 1994.*	Provide more detail on the technical solutions, management plans and procedures that will be adopted to prevent the risk of translocation.	13.2.1.2 (2.4.3.6, 29.9.11, 29.9.12)	Section 13.1 Section 13.2
	27.9.16	Commissioning of the fishway and spillway is likely to extend significantly beyond the completion of construction.	Ensure that commissioning arrangements between parties and associated defects liability and remediation responsibilities take into account the protracted commissioning processes for this infrastructure.	2.4.7.1	Appendix A2-B Section 1.2
	27.9.17	There is risk of the translocation of noxious and non-indigenous fish and aquatic flora and fauna between the Fitzroy and Murray-Darling basins during the commissioning of the pipeline, particularly if the pipeline fails. Fisheries is happy to provide advice on proposed management procedures and infrastructure to meet the requirements of the *Fisheries Act 1994*.	Provided more detail on how translocation risk will be addressed during the commissioning of the pipeline and associated infrastructure. Provide detail on how water will be managed and disposed of along the pipeline and at point of delivery during testing of the pipeline.	13.2.1.2 (2.4.3.6, 29.9.11, 29.9.12)	Section 13.1 Section 13.2
	27.9.18	Remote operation of the fishway passage infrastructure may lead to delays in adjusting and restarting fish passage operations when components trip out or break down.	Demonstrate how remote operation and maintenance will not compromise the operation of fish passage. There should be an operator present where mechanical fishways need to be operated and maintained.	2.5.1.1, 29	Section 2.1.2
	27.9.19	The decommissioned dam could become a barrier to fish passage	Decommissioning needs to make provisions for fish passage. Consult Fisheries in developing a decommissioning plan (dam and pipeline) that addresses this issue.	2.6.1	Section 26.1
	27.9.20	No introduced or exotic aquatic flora are currently found in the project area.	Provide details on steps that will be implemented to minimise the risk of exotic aquatic flora from being introduced into the dam and what the contingency plans in the event of weed infestation are.	29	Section 12.1 Section 29.8

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	27.9.21	Fish salvage using non-prescribed fishing apparatus and exceeding in-possession limits for fish species.	The activities require authorisation and a permit from Fisheries under the *Fisheries Act 1994.*	13.2.11	Appendix A2-B Section 1.2
	27.9.22	The diversion channel gradient and design will need to provide adequate fish passage as development approval requirement under the *Fisheries Act 1994.*	Consult Fisheries to develop an acceptable design as part of the attached fishway passage design and implementation process.	13.2.11, 29.9.6	Section 13.4
	27.9.23	Fish will need to be prevented from being entrained into the pipeline off-take.	Consult Fisheries to develop an acceptable screening or other method and design that prevents fish from entrainment.	2.3.2	Section 2.1.3
	27.9.24	Fish injury and mortalities.	Consult Fisheries to assist in the development of an acceptable spillway and downstream infrastructure design to prevent or minimise fish injury or mortality. This must be in accordance to the attached document.	2.3.1.2	Section 2.1.2
	27.9.25	Design intent for the fishway.	See attachment. Refer to the attached design process for fish passage. Ensure that this process is followed in the development of fish passage designs and procedures.	13.2.1.2	Chapter 13
	27.9.26	Impacts on connectivity for fish moving across downstream barriers.	Provide data on drown out (or bypass) frequencies at downstream barriers (without fishways). Data also required on frequency of fish drown outs on downstream barriers with and without the dam to determine the level of reduced opportunities for fish movement along the Dawson River. Comment on the necessity to keep all the downstream weirs once the dam is built and whether there are any opportunities to remove or lower existing weirs. Comment on potential future reduction of spill events under future modelled climate change scenarios and reduced connectivity for fish passage downstream.	13.2.1.1	Section 13.4
	27.9.27	Refer Issue 27.9.17	Refer Issue 27.9.17	13.2.1.2 (2.4.3.6, 29.9.11, 29.9.12)	Section 13.1 Section 13.2
	27.9.28	Rehabilitation of temporary and permanent creek crossings.	Provide more detail on what is intended in the rehabilitation of the creek crossings.	13.4	Section 13.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	27.9.29	Monitoring of the fish passage across the fish way will be required as part of the development approval under the *Fisheries Act 1994.*	Conduct fish passage monitoring at the spillway and fish way passage sites. Monitoring may extend over several years to incorporate events-based monitoring. Findings from the monitoring need to be responded to accordingly.	29.10.9	Appendix A2-B Section 1.2
	27.9.30	A development approval will be required under s76 of the *Fisheries Act 1994* where works will be undertaken across the waterway (i.e. within the stream bed)	Consult Fisheries early to identify whether pipeline sites are on waterways and to develop an appropriate design for the fish passage. Fisheries happy to assist with options that simplify the approval process.	2.4.3	Section 1.5.2.1
28.2	28.2.1	The project area is also in DTMR Fitzroy and South West regions.	Ensure future EIS related documents include all of the affected DTMR regions.	21.3.2.1	Section 21.1.1
	28.2.2	The proponent has based calculations and assumptions on old data (2009 AADT data). More current data is available for 2011.	The proponent should reassess all calculations using current AADT data for the Road Impact Assessment (RIA). A first draft of the RIA based on current information regarding traffic will be required as part of the AEIS.	21.3.2.4	Section 21.1.3
	28.2.3	The Pavement Impact Assessment has not been covered in detail.	The proponent to undertake a Pavement Impact Assessment (related to heavy vehicle movements) as part of the RIA in accordance with the DTMR Guidelines for assessment of Road Impacts of Development (GARID). The assessment should identify impacts on timing of pavement rehabilitation and need for regular maintenance. Consideration for maintenance should include: • assessment/intervention frequency of road condition dependant on haulage program • carry out preliminary condition assessment on cross-drainage structures.	21.4	Section 21.2.1.1
	28.2.4	No reference to crash history has been provided in this section.	The proponent to research and analyse crash data for the last five years as part of the Road Impact Assessment to determine what impacts the project may have on road safety.	21	Section 21.2.1.1
	28.2.5	The Roads Implementation Program has not been covered in detail. The proponent should consider the extensive works being undertaken and programmed over the project area as part of the Natural Disaster Relief and Recovery Arrangements (NDRRA) for both State and Local Authorities.	Future EIS related documents should include projects programmed under NDRRA in Table 21-2.	21.3.2.1	Section 21.1.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	28.2.6	This section has not addressed any assessment of existing intersections within the State-controlled road (SCRs) network as part of the EIS and has nominated that the proponent will consider this during the detailed design phase.	The proponent to provide SIDRA analysis of all relevant SCR intersections as part of the Road Impact Assessment to identify what impacts the project will have on the SCR network. A first draft of the RIA to be required as part of the AEIS to allow sufficient time to identify and undertake any required works.	21.3.8.7	Section 21.2
	28.2.7	This section of the EIS is vague in relation to the pipe haulage details and the likely impacts on SCRs.	As part of the Road Impact Assessment, the proponent is to provide details of the proposed pipe haulage including, but not limited to: • lay down locations including access points to SCRs; • haulage program including frequency and duration of haulage; • pipe source/s; • haulage routes; • assessment of likely impacts; • proposed mitigation treatments.	21.3.8.1	Section 21.2
	28.2.8	This section does not provide any detail around proposed road crossings of the pipeline.	The proponent is to provide detail of road crossings including but not limited to: • type of crossing • likely impact to infrastructure and the safety and efficiency of the road network during construction • proposed mitigation treatments to minimise impacts.	21.4.1	Section 21.2
	28.2.9	Limited information has been provided in relation to the pipeline construction and its impact on the SCR network.	The proponent is to provide details of the proportion of above and below ground construction of the proposed pipeline and the impacts, if any, on road infrastructure. These details should include: • locations of above-ground situations; • any impacts on existing bridge structures and or stream flows; • proposed mitigation measures.	21.4.1	Section 21.2
28.3	28.3.1	A Road Impact Assessment (RIA), Road-use Management Plan (RMP) and Traffic Management Plans (TMPs) shall be submitted to DTMR for review and approval prior to detailed design and the commencement of project construction.	Particular attention is required to establish exactly where the pipeline is to be located relative to road reserves. The Department also requires the option of transport of pipes by rail from Brisbane be investigated and reported on in future EIS documents.	21	Section 21.2
	28.3.2	This section does not include a reference to Section 62 of the *Transport Infrastructure Act 1994* regarding management of access between individual properties and SCRs.	The proponent should be aware and future EIS related documents should reflect that any access from a SCR requires approval under Section 62 of the *Transport Infrastructure Act 1994*.	Appendix 1- D	Appendix A2-B Section 1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	28.3.3	It is not clear from the description if Option 2 is accepted (i.e. where the proposed pipeline is planned to go). It is assumed the whole pipeline and its easement are located outside the SCR reserve.	The proponent is required to provide details of where the pipeline is to be placed longitudinally, (particularly areas close to the major highways e.g. Leichhardt Highway and the Warrego Highway).	1.7.8.2	Part C
	28.3.4	The department is not in favour of having the pipeline or its easement in any part of the SCR reserve.	The department does not support the inclusion of pipelines or their easements in the SCR reserve. It should be noted that in addition to the seven dot points raised on Page 1 – 33, the road corridors of both the Leichhardt and Warrego Highways have some high environmental/ cultural heritage values (e.g. endangered grasslands near Dalby).	1.8	Part C
	28.3.5	Refer Issue 28.2.1.	Refer Issue 28.2.1.	21	Section 21.1.1
	28.3.6	The three areas (3 dot points) describe the positioning of the pipeline – but Darling Downs Region needs clarification that the pipeline and its easement are outside the SCR Reserve.	Clarify absolutely that the pipeline does not in any way enter on the SCR reserve.	21	Section 21.2.1
	28.3.7	Intersection upgrades that may be required are not yet identified to ensure that the required infrastructure is put into place prior to pipeline construction works being undertaken. Also haul routes for pipes and other resources should be identified and impacts assessed.	Ensure that where intersection upgrades are required, it is identified early and all necessary processes are put into place to ensure that these works are completed prior to working on the pipeline. This may be through the RMP. Traffic Management Plans for the haul routes would also have to be discussed with relevant personnel in Darling Downs Region.	21.3.2.3	Section 21.2.1.1
	28.3.8	Refer Issue 28.2.2.	Refer Issue 28.2.2.	21.3.2.4	Section 21.1.3
	28.3.9	School bus services are subject to regular change – due to movement of families – change of schools etc.	Allow for a changing school bus route scenario. The proponent should review and assess any significant school bus route changes as part of updating the RIA .	21.3.3	Section 21.2.2.1
	28.3.10	The EIS is unclear about the location of accommodation camps at Wandoan and Chinchilla and whether they are existing facilities.	Advise the specific location of the accommodation camps and assess impacts on SCRs and describe impact mitigation measures.	21.3.8.2	Section 2.3 Section 21.2.1.2
	28.3.11	Need to clarify how raw materials will be transported to lay-down areas.	Clarify the haulage tasks and proposed lay-down areas for raw materials.	21	Section 21.1.2
	28.3.12	Pipes should be carried by rail prior to being taken to the closest lay-down areas to reduce use of the Warrego Highway as a haul route and to minimise amenity impacts.	The AEIS should state if the transport of pipes by rail has been considered and, if so, the reason for non-adoption of this option if the rail network has the capacity.	21	Section 21.2.1.3
	28.3.13	Estimation of the number of articulated vehicles (e.g. 306 articulated vehicles per day) needs to be clarified.	Further information is required on what the basis for this figure is and what the routes associated with these movements are going to be.	21	Section 21.1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	28.3.14	Assessing Level of Service (LOS) is acceptable for the urban environment but not in the rural areas.	As part of the RIA, the proponent is to use Width for Volume – Road Planning and Design Manual Chapter 7 – to consider if the current SCRs have sufficient width for their activity.	21.3.8.6	Section 21.2.1.1
	28.3.15	Dot points 10 and 12 (Implementation of mitigation measures) - all access points to SCRs require DTMR approval under s62 and s33 of *Transport Infrastructure Act 1994.*	Ensure future EIS-related documents accurately reflect approval requirements for access location and construction under the *Transport Infrastructure Act 1994.*	29.9.18	Section 29.10
	28.3.16	Third dot point down advises of briefing TMR and school bus operators.	These procedures should be amended to also include briefing of the relevant school bus committee.	29.9.18	Section 29.10
	28.3.17	The requirement to mitigate impacts is unclear.	Amend wording "Undertake condition assessment survey prior to construction. Reinstatement to the satisfaction of local authorities for local government roads and Department of Transport and Main Roads for SCRs of damage to roads that can be shown to be as a result of Project activities."	29.9.18	Append B29, Section 9.18
	28.3.18	Refer Issue 28.2.3 (identical)	Refer Issue 28.2.3 (identical)	29.9.18	Section 21.2.1.1
29	29.1	A request for an extension (at least three months) to allow for adequate consultation with the Iman and Wulli Wulli people.	Refer Issue 14.1 (identical)	1.5.20, 22	Section 22
30	30.1	Concern regarding the cumulative adverse impacts of workforce requirements for the multitude of projects on housing affordability and the amenity of households in the Taroom region of the Banana Shire.	Consider the following for the workforce accommodation camps (dam and pipeline) as part of the SIMP: • accommodation for the workforce required for the construction of the temporary workers' camps; • timing of the construction of the worker's accommodation village and impact on the local housing market. Evidence in other areas indicates that the demand for non-resident workforce accommodation in the pre-construction and construction periods have had detrimental impacts on housing supply.	24.3.7	Section 2.3.1 Section 24.7
31	31.1	The proximity of this work to the Warrego Highway is a concern. The highway is at saturation point due to the resource boom in the Surat Basin. This makes it high risk area.	Conduct ongoing consultation regarding the implementation of mitigation measures for the traffic impacts on the Warrego Highway, including regular consultation with the District Officers of Dalby and Roma Police Districts.	29.9.18	Section 29.10
	31.2	The delivery of bulk construction materials will be scheduled over several months prior to construction commencing in order to spread the transport load.	Supported.	29.9.18	Appendix B29 Section 9.18

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	31.3	Transport distances and distances travelled on public roads and unsealed roads will be minimised through delivery scheduling and the locating of areas and sites (such as camp sites, stockpile and lay-by).	Supported.	29.9.18	Appendix B29 Section 9.18
	31.4	Provision of suitable access and egress points, or upgrading existing points, between the public road network and the pipeline construction easement or the access track.	Access and egress points on the Warrego Highway be subject to reduced speed limits and traffic controllers.	29.9.18	Appendix B29 Section 9.18
	31.5	Implementation of Fatigue Management Program for workers.	Supported.	29.9.18	Appendix B29 Section 9.18
	31.6	The number of site accesses to be allowed along the Leichardt and Warrego Highways will be minimised. Access points to be located and placed with adequate sight distances and advance warning signs as per TMR's manual of Uniform Traffic Control Devices.	Access and egress points on the Warrego Highway are subject to reduced speed limits and traffic controllers at all times that work is underway at that location.	29.9.18	Appendix B29 Section 9.18
	31.7	Using the construction easement for delivery of materials and transport of workers and dedicated and trained personnel, where appropriate, to coordinate traffic on the easement.	Supported.	29.9.18	Appendix B29 Section 9.18
	31.8	Increases in resident and non-resident populations in the pipeline area and Western Downs Region may result in cumulative social impacts including an increased demand for social services, especially health and police services. While no other projects are located in close proximity to the dam area, a range of CSG, resource and infrastructure development projects are currently planned for the wider region and along the pipeline. As noted in Table 24-7, the workforce requirements of many of these projects are substantial, with up to approximately 10,000 new workers required for the construction of projects between 2010 and 2012. If realised, this would have a direct impact on the resident and non-resident populations of townships such as Wandoan, Chinchilla and Dalby in the study area.	Proponent to commit to making a financial contribution to the provision of increased policing services, which may include staffing, vehicles, communications and accommodation. Surat Basin Cumulative Social Impact Assessment Roundtable (similar to that imposed on the Alpha Coal Project – see Evaluation Report, Appendix 2, p. 287) to consider cumulative impacts of this project and future resource projects on policing services in Wandoan, Taroom and Miles. This framework would allow for an integrated infrastructure plan to be set out in the SIMP of this project and future resourcing projects in close proximity to Wandoan, Taroom, and Miles.	24.6 24.12	Section 24.6 Section 24.6
	31.9	Undertake targeted consultation with key stakeholders (including Skills Queensland, DEEDI (employment and indigenous initiatives, OAM), other government agencies, the Surat Basin Local Leadership Group and social service providers) to align strategies more closely with existing regional and community plans.	Form a new group (Surat Basin Cumulative Social Impact Assessment Roundtable) include invitations to all groups and other key stakeholders mentioned in Table 24.43.	24.43 (Table)	Section 24.4
	31.10	General recommendation.	Develop a Fatigue Management Plan to limit road safety risks.	24.47 (Table)	Appendix B29 section 9.18.

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	31.11	General recommendation.	Develop a Traffic Management Plan, in consultation with Queensland Police Services and other key stakeholders.	24.47 (Table)	Appendix B29 Section 9.18
	31.12	General recommendation.	Engage Queensland Health and Queensland Police in the Project's emergency response planning process.	24.47 (Table)	Appendix B29 Section 9.18 and Section 10.3
	31.13	General recommendation.	Establish ongoing relationships with the Queensland Police "Officers in Charge" at each affected township, and undertake coordinated safety and security planning.	24.47 (Table)	Appendix B29 Section 9.18, 9.20, 10.3, and 10.11
	31.14	General recommendation.	Alert Queensland Police of any known or potential community protest action against the project.	24.47 (Table)	Appendix B29 Section 9.18, 9.20, 10.3, and 10.11
	31.15	General recommendation.	Develop an Emergency Response Plan in consultation with Queensland Police	24.47 (Table)	Appendix B29 Section 9.18, 9.20, 10.3, and 10.11
	31.16	General recommendation.	Provide advanced notice of the requirement for any police escort vehicles for oversized loads	24.47 (Table)	Appendix B29 Section 9.18
32	32.1	Refer Issue 14.1 (identical).	Refer Issue 14.1 (identical).	1.5.20, 22	Section 1.3 Section 13.9 Chapter 22 Chapter 24..2 Chapter 29.7 Appendix A2-B Section 1.2
33.1	33.1	Need to include accommodation camps as sensitive receptors when assessing the cumulative impacts on public health values.	Consider all accommodation camps as sensitive receptors (e.g. noise, air quality and vibration).	17.1.4 17.1.4.1 19.1.3.1	Section 2.3.1
	33.2	Recreational facilities should not pose any health risk to public users.	Provide appropriate signage indicating if water is not potable. If potable water is to be supplied it must be treated and monitored in compliance with the relevant standards, guidelines and legislation relating to human consumption. Provide shading and sun protection at recreational facilities.	29	Section 29.5.1
	33.3	Concern that information provided in EIS regarding contaminated land is not adequately considered. There is no indication that contaminated sites will be removed from the environmental management register (EMR); how contaminated land issues will be remediated and minimised (with regard to public health); or direction regarding contaminated sites which are underwater.	Identify actions that will be used to remediate contaminated sites that will be inundated by the dam and to minimise any potential adverse human health impacts.	8	Section 8.1, section 1.5.3.5., and Appendix 29 sections 9.1, 9.5 and 9.8

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	33.4	In relation to the possibility of providing water to drinking water service providers there is limited consideration to managing water quality risks or a comprehensive water quality risk assessment.	Provide a water quality management plan in accordance with the risk management framework 'Australian Drinking Water Guidelines 2011' to manage aspects that affect water quality and minimise impacts on human health. Undertake a water quality risk assessment covering point and non-point sources (both in the inundated and surrounding catchment area) including water received from surrounding industry and risks that may arise as a result of storage and recreational use. Develop a water quality risk management plan from the dam from this risk assessment.	16	Appendix B-29 sections 9.1, 9.4 and 9.8
	33.5	There is also no consideration of a monitoring program or an incident response process to notify downstream users of emerging water quality hazards.	Provide a management response that includes communication and incident response protocols that ensure that water quality issues are communicated to the relevant entities within the appropriate timeframe.	16	Section 16.8 Appendix B29 Section 9.8 and 10.6
	33.6	Concern that reduction of flows of the Dawson River will adversely affect the water quality downstream, particularly in the lower Fitzroy River where water from mines is discharged.		16	Section 16.8 Appendix B29 Section 9.8 and 10.6
	33.7	Concern that associated water from CSG extraction is likely to impair water quality downstream during dam releases if it enters the dam. This is likely to impact on drinking water.	Consider the development of a catchment management plan to prevent impacts on the dam water quality from activities in the catchment.	16	Section 16.8 Appendix B29 Section 9.8 and 10.6
	33.8	It is unclear what controls will be implemented in order to ensure water quality will be appropriate for the provision of raw water to drinking water service providers.		16	Section 16.8 Appendix B29 Section 9.8 and 10.6
	33.9	It is unclear how water quality will be managed to ensure there are no unacceptable risks to recreational users.	Ensure risks to public health associated with recreational use of the dam are managed in compliance with the National Health and Medical Research Council's 'Guidelines for Managing Risks in Recreational Water'.	16	Section 16.8 Appendix B29 Section 9.8 and 10.6
	33.10	The local landfill facility intended for project waste disposal should only be used for the disposal of small quantities of general waste. There is concern that use of this facility for large quantities of waste will impact on the local residents' ability to use this facility and lead to public health issues.	Reassess the project's impact on local and regional waste storage and disposal facilities to identify any risks to human health and well being. Consider disposal at another location at the 'Trap Gully' landfill site in the Banana Shire.	20	Chapter 20

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	33.11	The construction and operation of the dam and pipeline will further exacerbate the impacts associated with the increased demand for local housing/accommodation and services.	Conduct an assessment of the project's impacts on local housing availability and affordability including a cumulative assessment on housing and housing requirements for additional essential service workers (e.g. health related workers). Provide mitigation strategies to manage these impacts in the SIMP and include these strategies as a action against the cumulative impact of housing initiatives (Table 24-40).	24.3.7 24.5.5	Section 24.7
	33.12	Need to provide a more comprehensive management strategy for the proposed fatigue management plans and educational programs.	Develop a more comprehensive road safety strategy as part of the SIMP to deal with impacts associated with increased traffic volume. This could include possible upgrades (Leichhardt Highway and Stoney Crossing) and intensified maintenance or local road use restrictions for project traffic. These strategies are to be developed in consultation with relevant local councils and the DTMR.	24.3.30.3 24.5.8 29	Section 21.2.1.1. Section 24.6. Appendix B-29 section 9.18.
	33.13	Need to identify whether food will be produced and provided onsite for workers in worker camps.	Ensure the provision of food to the workforce is in compliance with the *Food Act 2006* and that healthy options are provided.	N/A	Section 2.3.1 Section 24.7
	33.14	There is no consideration for the provision of onsite medical facilities in the accommodation camps including the issue of possession and use of scheduled medicine and poisons.	Ensure that the necessary approvals are obtained from Queensland Health in accordance with the *Health (Drugs and Poisons) Regulation 1996* if workforce accommodation camps will be obtaining, possessing and using scheduled drugs and poisons.	1.11	Section 2.3.1 Section 24.7
	33.15	There is no adequate consideration for the management of alcohol and tobacco in relation to the design and conduct of the accommodation camps.	Develop a alcohol management plan in accordance with the *Australian Guidelines to Reduce Health Risks From Drinking Alcohol*. Ensure that accommodation camps are designed as either a smoke free environment or have a single, outdoor designated smoking area away from other residents. Develop a code of conduct and provide options for support such as 'Quitline', the Alcohol and Drug Information Service and local GPs.	2.4.6	Section 2.3.1 Section 24.7
	33.16	Need to include a mosquito management component to the pest management plan (including reference to the *Health Act 1996* for mosquito and vector borne disease control programs and the *Public Health Act 2005* for reducing public health risks).	Develop a comprehensive plan to manage mosquitoes. Refer to the '*Guidelines to minimise mosquito and biting midge problems in new development areas*'.	29.9.11	Section 13.9 Section 29.7

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
34	34.1	There is insufficient detail in the SIMP particularly in relation to the consultation process with the community	Conduct consultation that allows all community members, including people with a disability to fully participate. The EIS should outline the need for accessible venues and alternative communication strategies in accessible formats to be available for those who use alternative communication mediums and /or people for whom English is a second language. Consultation strategies should include engagement of both traditional owners and other Aboriginal and Torres Strait Islander people who are residents in relevant communities. Proponents should reflect on the 'Closing the Gap' framework as part of the EIS process. Conduct comprehensive consultation with source communities (Gladstone, Rockhampton, Hervey Bay and Toowoomba) that may be negatively affected by workforce requirements.	24.1.2, 24.9	Section 24.4
	34.2	Data used needs to be updated through more comprehensive consultation with the Office for Women and the Centre for Domestic and Family Violence.	Include the following strategies within the induction process: ▪ promotion of positive community culture in relation to alcohol use, providing information on the negative impacts of alcohol use for minors; ▪ provide additional strategies and detail in the Workforce Housing and Wellbeing Action Plan; ▪ proponent to increase its level of consultation with the Office for Women and the CQ University Centre for Domestic and Family Violence Research; ▪ use more 'up to date' data and base-line assessments to determine instances of violence, drinking, drug use in host and source communities, and include a monitoring regime and strategy in the SIMP.	24-31 (Table), 24.5.9 24.5.8, 24.9	Section 24.8
	34.3	Need to invest in the development of a good citizen policy and workers induction process. There is a need to more adequately address a range of social issues which have been noted in similar communities including increased violence, drinking and drug use.	Strategies should: ▪ promote and support opportunities for mine workers to volunteer in the host community including supporting local sport and recreation groups; ▪ encourage mine employees and contractors to engage in sport and recreational activities in their local community whether that be the host or source community. Sport and Recreation should provide direct comment in relation to the strategies to promote healthy lifestyles in the camp. Provide more detail in relation to the allocation of funds and commitment by the proponent to the Community Investment Fund.	24.5.2, 24.9 24-45 (Table)	Section 24.8

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	34.4	The strategies outlined in the draft SIMP do not adequately address the needs identified by the community and priorities for employment strategies. The SIMP's workforce management and recruitment policy should be a condition of each contractor's agreement.	Develop strategies in relation to pre-vocational, employment preparation, numeracy and literacy and basic skill development programs.	24.5.2, 24.9 24-45 (Table)	Section 24.1
	34.5	The strategies in the SIMP for employment and education do not provide detail of what strategies will be developed to target employment for Women, Aboriginal and Torres Strait Islander People and People with a Disability.	Develop strategies, targeting employment of Women, Aboriginal and Torres Strait Islander People, People with a Disability and people from culturally and linguistically diverse backgrounds.	24.5.2, 24.9 24-45 (Table)	Section 24.1 Section 24.2
	34.6	The Draft SIMP does not adequately reflect the potential impact on source communities in relation to employment and training needs.	Provide further detail on the likely impacts and needs of the source communities (Gladstone, Rockhampton, Toowoomba and Hervey Bay).	24.5.2, 24.9 Table 24-45	Section 24.1
	34.7	The Draft SIMP may benefit from additional information on : ▪ long-term planning for infrastructure and development; ▪ increased monitoring of baseline indicators for social and community services; ▪ more comprehensive assessment of the cumulative effect on source communities in other areas including Rockhampton, Toowoomba, Hervey Bay and Gladstone. Concern that the cumulative effect of multiple projects in Gladstone on housing and services (e.g. childcare, teaching, health, aged and residential care) has not been adequately addressed. The Employee Assistance Scheme program mentioned as a potential strategy will not adequately address the issues such as increased demand for social services.	The Draft SIMP should include: ▪ a comprehensive Accommodation and Housing needs assessment and an Accommodation Management Plan to accompany the SIMP; **N/A** ▪ future planning for long-term use of housing development including plans to use accommodation for social and affordable housing, or for community infrastructure after project completion; ▪ the development of baseline indicators relating to social and community services based on an increase in population, particularly early childhood, health and disability services; ▪ inclusion of assessment strategies for potential source communities, including the predicted changes to the cost of rental, purchasing accommodation, social and affordable housing; ▪ inclusion of strategies and opportunities for both workers and community members to interact in a mutually beneficial manner; ▪ a more comprehensive investigation of the potential impacts to both the host and source communities is required in relation to the areas outlined below with more detailed mitigation strategies included. The particular areas of concern for the community are: ▪ Child Care Services ▪ Health, Aged, Disability and Residential Care Services ▪ Transport and Road Safety There may also be a benefit to further exploring the ability of the proponent to contribute to the community through a sharing of resources such as communication, broadband and power infrastructure by adding extra capacity to benefit the local community members.	24.5.6 24.5.61 Table 24-47	Section 24.5 Section 24.6 Section 24.7

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	34.8	It is felt that the Draft SIMP and associated actions plans would benefit from more comprehensive strategies relating to the development of local business opportunities.	Strategies may include: ▪ Opportunities that enhance the social capital within the local area, including increased support for small businesses. ▪ Development of opportunities for small businesses to encourage traineeships and employment, particularly for young people, Aboriginal and Torres Strait Islander People, and people with a disability. ▪ SIMP measures outlined to be applied not only to direct employees but also contracted workforce as well. It is advised that the proponent negotiate with its contractors about ways they will meet their responsibilities in the SIMP. Contracting agreements should reflect this commitment. ▪ Monitoring should be included regarding contracted staff including - cleaning, catering, maintenance, professionals, etc.	24.5.3 24-46 (Table)	Section 24.3
35	35.1	Concern regarding the use of dam water for CSG operations in terms of transport, use, and disposal of CSG water. Refer Issue 2.0.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	ES	Appendix A2-B Section 1.1
	35.2	Concern that farmers will be dropped as customers upon dam completion due to affordability issues. Refer Issue 2.0.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	ES	Section 1.1 Appendix B29 Section 10.11
	35.3	The project is unlikely to meet customer expectations in regards to reliability and cost. Refer Issue 2.0.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	ES	Section 1.1 Appendix B29 Section 10.11
	35.4	QMDC does not support the construction of the pipeline because of CSG water will be transported out of the region and not treated onsite. Refer Issue 2.0.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	ES	Appendix B29 Section 9.8 and 10.6
	35.5	Ensure the disposal of CSG water is adequately managed. Refer Issues 3.0, 4.10.1 and 4.10.4.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	ES	Appendix B29 Section 9.8 and 10.6
	35.6	Ensure the risks of associated water use are adequately assessed and managed. Refer Issues 4.1, 4.2, 4.3 and 4.10.2.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	ES	Appendix B29 Section 9.8 and 10.6
	35.7	Impacts of emergency water releases on downstream users. Refer Issues 4.4 and 4.10.7.	Consider the impacts of emergency releases on downstream users and ensure that these release meet regional water quality guideline limits.	ES	Appendix B29 Section 9.8 and 10.6

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	35.8	Prevent adverse impacts on the region's natural resources, community and economy from the mining industry by adopting responsible business practice. Refer Issue 4.5.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	ES	Appendix B29 Section 9 and 10
	35.9	Ensure that the cumulative impacts of the project on the community, environment and economy are adequately assessed and managed. Refer Issues 4.6 and 4.7.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	ES	Chapter 27 Appendix B29 Section 9 and 10
	35.10	Community engagement strategy. Refer Issue 4.8.	Ensure the development of a community engagement strategy and transparent information sharing.	24.9 (ES)	Section 24.4
	35.11	Financial assurances and contributions, including planning and addressing unique issues of small rural and residential landholders. Refer Issue 4.9	Ensure environmental, social and economic impacts are minimised through financial assurance, financial contributions, rehabilitation planning and addressing unique issues of small rural and residential landholders.	24.9 (ES)	Section 7.2, Section 14.3, Chapter 6 Section 24.3 Section 25.3
	35.12	Water quality is monitoring. Refer Issues 4.10.6 and 4.10.10.	Ensure that water quality is monitored appropriately and data results independently reviewed and made available to the public.	14	Appendix B29 Section 9.8 and 10.6
	35.13	Community consultation. Refer Issues 4.10.8 and 4.10.9.	Ensure community consultation strategy is implemented.	24.9 (ES)	Section 24.4
	35.14	The construction of the dam and pipelines must maintain and improve the natural assets and function in the region.	Demonstrate how ecological values along the pipeline will be managed.	10, 11	Section 10.2
36	36.1	The Jimbour Action group supports Mrs Zena Ronnfeldt's submission (Refer Issue 8). Concern about the position of the pipeline, particularly between Warra and Dalby including impacts associated with erosion, interference with overland flow, the railway, Warrego Highway and telecommunication cabling.	The pipeline route between Chinchilla and Dalby to be reconsidered and moved further west (so it is closer to its users).	6.2.2.2	Section 7.2
	36.2	Impacts on SCL and agriculture have not been adequately considered.	The pipeline route between Chinchilla and Dalby to be reconsidered and moved further west (so it is closer to its users).	6.2.2.2	Section 7.1.2 Section 7.2.2
37	37.1	Capricorn Conservation Council (Fitzroy Water Quality Advisory Group member), seeks to play a community educative role.	Extend opportunities for CCC and network partners e.g. Fitzroy Basin Association and groups such as Birdlife Australia to meet to discuss the ecological/nature conservation aspects of the Nathan Dam and Pipeline proposal.	24.9	Section 24.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	37.2	The economic viability of the dam should undergo more rigorous 'triple bottom line' assessment given the uncertainty of future costs associated with CO2 emissions from project operation.	Conduct greater climatic variability modelling to assess economic viability for dam construction and operating costs.	14.2.2.7	Section 1.1 Section 14.1.4
	37.3	The inundation map needs to show the H-L limits e.g. maximum flood afflux for above record flow and extreme ongoing regional rain events.	Mapping to show minimum and other ranges of heights, that indicates the probability and extent of 'dead' riparian zone.	14	Section 14.2.2
	37.4	Need to provide more detailed mapping of pipeline alignment alternatives.	Provide more detailed, ground-truthed mapping of all current and possible project corridors to determine viability of route/costs and dissection of biodiversity corridors.	14	Section 1.4.1
	37.5	1:100 AEP should be extrapolated to the maximum possible event.	Include predictions of greater flood possibilities in regards to predicted climate variability.	14	Section 14.2.2
	37.6	Aquatic fauna transfer.	Conduct a long term study of all Fitzroy Basin artificial barriers' effectiveness in providing aquatic faunal transfer.	N/A	Appendix A2-B Section 1.1
	37.7	The EIS dismisses the impact on the Great Barrier Reef because of the distance from the point of discharge.	Greater rigour to justify the processes of interconnectivity especially given the current and proposed situation of water storages impact on species migration.	N/A	Appendix A2-B Section 1.3
	37.8	The dam will change flow regimes and water conditions.	Conduct research in regards to the issues raised in the recent Biosecurity Queensland toxicological study (post Ensham 2008) and the work of the coal industry has carried out on microbial and macro-biotic species resilience to varying water conditions.	N/A	Appendix A2-B Section 1.1
	37.9	Impact of artificial dam stocking; genetic diversity species mix.	Examine species diversity above and below water storages through the Fitzroy Basin, compared to historical data. Describe what monitoring measures will be undertaken to ensure known problems of artificial stocking are avoided.	13.1.3.3	Section 13.3
	37.10	Need to investigate the toxicology of soils and water storages to determine the occurrence of emerging pathogens.	Conduct research into recently emerging pathogens described in the report by Dr Larelle Fabbro CQU to CQ Mine Rehabilitation Group.	N/A	Appendix A2-B Section 1.1
	37.11	Need to identify the impacts of introduction of 'clean coal technology'	Provide detail on how the economic viability of the dam will be assured. This should include assessment of risk factors for making assumptions on unproven 'clean coal' technology.	1.3	Section 1.1
	37.12	Agricultural water too costly.	(Explain) how the community, regional economy and the river ecology will benefit from the interference with the natural state of the river in the future when there is a transition to renewable energy sources.	1.3	Section 1.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	37.13	Assumption that if short-term demand is small, the long-term demand may increase.	This speculative analysis requires more detailed scrutiny to ensure the economic risk and community benefits are such that the acknowledged ecological harm is balanced.	14	Section 1.1
	37.14	Concern regarding the withdrawal of large corporations impact on the feasibility of the dam.		1.3.2	Section 1.1
	37.15	Concern regarding the statement 'limited vulnerability to climate change'. Concern how the dam will enable 'conservation of a representative array of well-functioning ecosystems'.		14	Chapter 3
	37.16	Concern regarding the statement "Residual risks are acceptable and can be effectively managed"	Provide greater explanation and justification to this statement.	Cross-ref (ES 1.5.2)	No AEIS cross-reference. Refers reader to EIS section 5.4.4
	37.17	Concern that the landscape character and visual amenity have been dismissed because the inundation area is not publicly accessible.	Conduct further assessment of the how the riparian vegetation and associated fauna communities will be impacted in the town reach of the river with possible loss of trees from altered water table and variable inundation levels.	Cross-ref (ES 1.5.2)	No AEIS cross reference. Refers reader to EIS section 5.4.1.1
	37.18	Concern regarding the hydrological effects of dam releases and how the dam EMP will adaptively manage bank slumping and re-routing of streams during releases.	Include management strategies to deal with flooding events and discuss how the 'regulation' of flow though the impoundment would improve or deplete riverine ecological health.	14	Section 14.4 Chapter 29
	37.19	Concern that the primary use of the water is designated for fossil fuel mining and costs of the water for agriculture may be prohibitive.	Need to justify the triple bottom line philosophy when the economics of coal consumption decline from global economic downturn or transition to renewable energy.	1.3	Section 1.1 Section 25.2
	37.20	Concern regarding water contamination by new species or forms of bacteria, cyano-bacteria and algae that have been identified in the Fitzroy Basin and residual cadmium in local soils.	Develop a more comprehensive checklist of residual and emerging microbial forms which could increase during high rainfall periods, altered wet/dry soil balance and deeper stiller waters. Assess the catchment and inundation area to determine the risks of contamination and detail mitigation strategies.	16	Appendix B29 - Section 9.8 and 10.6
	37.21	UNECSO WHA mission and GBR Strategic Assessment .	Nathan Dam proposal should consider total environmental impacts of the water users.	9.3	Appendix A2-B Section 1.3

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	37.22	The creation of the dam pondage will have an impact on the surrounding region due to a change in habitat which may favour some waterbirds but change the species mix of predators and probably feral animals like pigs.	Conduct further study on wider terrestrial environment impacts on surrounding protected areas.	11 (ES 1.5.8, 1.5.9)	Section 11.4
	37.23	Lake Murphy and other wetlands may be impacted by the factors above. The microclimate and regional ecological mix will change as a result of the dam	Acknowledge these factors and conduct a more regional study over multiple dry wet seasons to determine the full range of possible positive and negative ecological impacts.	9.3	Section 9.1.1
	37.24	The extent of loss of the GAB spring wetlands appears well beyond the capacity of any offset or restoration capabilities. Concern regarding how much threatened remnant vegetation (e.g. Brigalow) is under mining CSG operations, mine exploration, and other threats such as continued dissection by pipelines, roads, rail corridors, power lines.	Verify what studies have been done on the loss of and restoration or replacement of GAB springs and the consequent changes to species diversity and adaptability. Provide assessment and proof that offsets are actually possible. Discuss where offsets would be located and over what period they would require planning, management monitoring and protection. Discuss how would they be protected from loss from other projects. Ensure that publicly accessible peer review monitoring be conducted over the implementation of offsets.	10.4 (ES 1.5.8)	Section 28.1.4
	37.25	Concern regarding the protection of critically endangered Boggomoss Snail and the viability of the existing population.	Include evidence that the loss of habitat can be mitigated through translocation.	11, 28 (ES 1.5.9)	Section 28.1.2
	37.26	Assumption that Boggomoss Snails can be found, caught and successfully relocated.	Describe how the carrying capacity and suitability of new snail habitat sites will be assessed and monitored.	13 (ES 1.5.9)	Section 11.5 Section 28.1.2 and Appendix B29 section 9.10 and 10.10
	37.27	Finite limits on suitable remnants.	Review total state database (if it exists) of all proposed offsets of similar vegetation type (in addition to stated intention Nathan Dam CLG) of assessing whole of Fitzroy basin impacts from the three current proposals Nathan, Connors River and Lower Fitzroy Infrastructure project, as well as historical pre-clearing pre-other dam/weir infrastructure state.	10.4 (ES 1.5.8)	Section 10.2.4 Appendix B1-B
	37.28	Revegetation is a costly, time-consuming and very uncertain process. It is difficult to reproduce an environment that is close to its original state.	Discuss how these concerns will be addressed.	10.4 (ES 1.5.8)	Section 10.2.3 Section 10.2.4, Section 29.6 and Appendix B29 section 9.9

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	37.29	Altered state from natural flows to large deep water body.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	N/A	Appendix A2-B Section 1.2
	37.30	CCC understands that a study is being made into a turtleway at Tartrus Weir.	Provide details on the study timeframe, whether results will be publicly available and peer reviewed and how the understanding of applicability and transferability of the transfer devices will be applied to much larger structures like Nathan Dam. Identify what data is available to show various turtle species' distribution prior to other Dawson River weirs and what studies are available to show the impacts of other existing structures e.g. Eden Bann Weir.	13.2.1.2 (ES 1.5.11)	Section 13.5
	37.31	Concern regarding the risk of spreading noxious introduced species and impacts on native species.	Conduct more studies and risks assessments.	N/A	Appendix A2-B Section 1.1
	37.32	SunWater asserts that multi-level off-take 'is expected to deliver suitable water quality and flows'. While quantity of flow may be able to be managed to approximate range of variable Dawson River flows, the water will be different to historical flows from storm events, floods or spring feeds.	Provide detail on how the multi-level offtake will adjust temperature without changing the dam pondage profile (i.e. greater reduction of warmer, more highly oxygenated, water with colder, lower oxygenated water) to ensure there is not a sudden temperature change in water upstream and downstream. Note how the mechanical mixing of algal rich upper waters with potentially anaerobic, bacterial-rich deep waters may alter water quality below the dam.	16 (ES 1.5.12)	Section 16.5
	37.33	Concern regarding the effectiveness of the fishway.	Include studies on the effectiveness of the fishway.	13.2.1.2 (ES 1.5.11)	Section 2.1.2 Section 13.4
	37.34	Concern that the total flow of the Dawson River will decrease on an annual basis as a result of the dam. Concern regarding whether SunWater will act as guarantor and contribute to a damage mitigation trust for the life of the dam.	Conduct an assessment of extensive (possibly simultaneous) fragmentation of the system. Consider what scientific methodology and control assessment is available to assess the system's ecological resilience and limits. Consider adaptive management and precautionary principle in regards to decommissioning of the dam. Consider what contingency will exist (and how will it be funded) if the dam had to later be removed or severely modified.	2.6 (ES. 1.5.12)	Chapter 14
	37.34	Concern regarding water quality with the release of long-term storage (relatively stagnant) water associated with major flow events following periods of drought.	More studies required and explanation of the how these concerns will be managed.	16 (ES 1.5.12)	Section 16.5

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	37.35	Concern regarding the difficulty and cost of aquatic weed control.	Consider how aquatic weed control will be managed without incurring large weed control costs and environmental hazards.	29 (ES. 1.5.14)	Section 29.8, Appendix B29 section 10.7.
	37.36	Concern regarding the uncertainty of the economic viability of a dam that is primarily used for fossil fuel extraction and burning purposes.	Consider the potential (and economic viability) for the dam to use the water for improving the ecological health of the catchment and contribution to social good e.g. food production and greenhouse gas reduction.	1.3, 1.6 (ES 1.5.16)	Section 1.1
	37.37	Concern that Nathan Dam will require long-term water supply contracts in order for the project to proceed and make a positive economic contribution to the community.	Conduct economic modelling that considers a more expansive range of variables over the life of the dam. Place an actual value on ecological factors and species protection. Place an economic value on nature or natural systems.	25 (ES.1.5.23)	Section 1.1 Section 25.2
	37.38	Concern regarding the difficulty for CCC as a volunteer group to truly contribute constructively to all projects.	SunWater should extend the period for community consultation, research and if approved there is a need for community representatives to have a real place in the reporting and monitoring processes.	1.10 (ES 1.6)	Section 24.4
	37.39	Community involvement and earning trust.	Allow more time for economic modelling, ecological studies and community engagement before proceeding with the project.	29 (ES. 1.7)	Appendix A2-B Section 1.3
38	38.1	Refer Issue 14.1 (identical).	Refer Issue 14.1 (identical).	1.5.20 , 22	Sections 1.3,13.9, 22,24.9, 29.7 Appendix A2-B Section 1.2
39	39.1	Need to provide more information on high priority water demands.	Provide more detail on the demand and prices willing to be paid for high priority water similar to what is presented for medium security demand.	1.3.2.1, 14	Section 1.6.1
	39.2	Need to present pricing for high priority water.	Provide more information on the pricing similar to information provided for Paradise Dam.	1.3.2.1, 14	Section 1.6.1
	39.3	Need to provide detail on how the capital costs for medium security water were calculated and how they reflect the true cost of water. The operational cost of the dam needs to be listed separately from cost of the pipeline.	Additional consultation with water harvesters.	1.3.2.1	Section 25.3.4 (See Section 1.6.1)
	39.4	No detail on how unsupplemented users are going to be compensated for loss of water harvesting opportunities.	Improved consultation needs to be conducted with water harvesters over possible compensation options.	14.2.2.1	Section 14.3, Appendix B14 for strategy, Appendix A01-B for consultation. Section 25.3.5.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	39.5	The COAG-endorsed National Water Initiative pricing principles should be used when calculating the compensation for loss of entitlements for existing users. Compensation should reflect the loss of production in some years and not just on the average over the modelling period. Modelling should be completed (in years) to show when the dam is below the height of outlet two when higher flood volumes can be released.	Additional analysis should be undertaken.	14.2.2.1	Section 14.3 Section 25.3.5.1
	39.6	Reduction in water availability could have a significant flow-on effect to the Queensland Cotton Gin in Moura.	Adequately address the flow-on effects of reduced water availability and develop compensation strategies with affected irrigators as soon as possible.	25.3.2.5	Section 25.3.5
	39.7	Water resource modelling should use the latest data available	Modelling of data should include the latest information including about the most recent major floods (2010/11)	14.1.2.2	Section 14.1
	39.8	The high priority allocations of the dam have the potential to negatively impact on existing irrigators during periods of drought when dam levels are low. This impact has not been addressed.	Provide more information on the impact of the dam on existing users during low flow years.	14.1.6.3	Section 14.1.4
	39.9	Modelling under the new Fitzroy Basin WRP 2011	New modelling should be presented with the changes made to the Fitzroy Basin Water Resource Plan 2011, including changes with regard to water allocation security objectives (WASOs) for unsupplemented users.	14.2.2	Section 14.1
	39.10	Given the post-winter flows are conditional on the dam being above a trigger volume of 150,000 ML, water harvesters with 15 cumec licences could be significantly impacted by the reduction in flow.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	14.2.2.1	Appendix A2-B Section 1.2
	39.11	The stated yield of the dam is 66,000 ML and the Fitzroy Basin WRP outlines a reserve of 90,000 ML for infrastructure.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	14.2.2.1	Section 14.1.4
	39.12	The impact on of the dam on irrigators has not been adequately addressed in the EIS. Table 14-31 shows the average change over the modelling period, however the impact in individual years has not been modelled.	Ensuring that no new high priority allocations be allowed out of the dam until it reaches the height of outlet 2 (278,042 ML).	14.2.2.2	Section 14.1.4 Section 14.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	39.13	Irrigators have already faced reduced allocations due to the introduction of new high priority allocations for the Moura Off-Stream storage. There has been no mention of what level of reserve would be required for the new high priority allocations.	No new allocations to be made if there is going to be an impact on existing water users. Determine a minimum storage volume (i.e. height of outlet 2) before any new allocations can be made.	14.2.2.5	Section 14.1.4
	39.14	The time-to-fill analysis has only been done for 85 ten year periods. Information should be available now to do the analysis up to 2011.	Complete the time-to-fill analysis using the latest available information.	14.2.2.5	Section 14.1.4.6
	39.15	A level of service analysis (LOS) needs to be completed for medium security allocations and unsecured allocations.	Update WRP model and clarify impacts to existing water users.	14.2.2.7	Section 14.1.4.8
40	40.1	Arguments to support the construction of the dam/pipeline are based on predictions that may not eventuate.	Further investigation into these aspects must occur prior to final decision making.	1.3 (ES 1.3.2 - ES 1.4)	Section 1.1
	40.2	The fauna habitat and riverine communities along the Dawson River cannot be offset by 'like communities' due to none being available.	Make offset strategies available prior to approval.	10.4 (ES 1.5.8)	Section 10.2.4 and Appendix B1-B
	40.3	Information is not available to determine if proposed offsets are appropriate.	Include offset strategies that delineate the actual areas to be protected, indicating current condition and long-term management options prior to approval.	10.4 (ES 1.5.8)	Section 10.2.4 and Appendix B1-B
	40.4	Need for additional studies to update flora and fauna data in light of recent flooding events and EPBC listing of the koala as 'vulnerable'.	Additional flora and fauna studies to be undertaken prior to approval.	10, 11 (ES 1.5.9)	Section 10.1 and 11.2 Section 10.1 and 11.2 Section 10.1 and 11.2
	40.5	The stated figures for the Boggomoss Snail populations differ significantly to the figures obtained in similar surveys.	Independent panel to undertake population and habitat studies of the Boggomoss Snail to resolve the apparent conflict in population estimates and habitat preference.	11, 28 (ES 1.5.9)	Section 28.1.2
	40.6	SunWater indicate intention to relocate Mt Rose Station Boggomoss Snail population.	Relocation trials should be undertaken to determine the likelihood of success prior to any attempt to relocate the Mt Rose Station population.	11, 28 (ES 1.5.9)	Section 28.1.2
	40.7	Need for additional studies and the development of protection strategies in regard to the recent listing of the koala as 'vulnerable' under EPBC Act.	Develop strategies for the protection of the koala and its habitat.	11, 28 (ES 1.5.9)	Section 28.1.1
	40.8	There is a possibility that the Fitzroy River Turtle occurs in the proposed development site.	Undertake additional surveys.	13, ES 1.5.11	Section 28.1.3
	40.9	Concern that passage mechanisms for aquatic fauna can fail under some circumstances.	Establish a turtle and fishway that provides safe passage under all circumstances.	13, ES 1.5.12	Section 2.1.2, Section 13.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	40.10	It is difficult to determine whether flora translocation or propagation rehabilitation strategies work.	Provide more detailed information.	10 (ES 1.5.8, 1.5.9)	Section 10.2.2
	40.11	Concern about the dam's impact on environmental flows.		14 (ES 1.5.12)	Section 14.1.4.2, 14.1.4.9
	40.12	Concern there is no certainty that mitigation strategies will prevent significant impacts to groundwater nor whether monitoring timeframes will be appropriate to determine the success of these strategies.	Provide more information.	15 (ES 1.5.13)	Section 15.5.1
	40.13	There is not enough data to determine the success of offsets to prevent the loss of spring flora and fauna.	Provide more information.	10.4 (ES 1.5.8, 1.5.9)	Section 10.2.4, Chapter 28, Appendix B1-B
	40.14	The greenhouse gas emissions associated with end use of water (e.g. mining) has not been considered in the overall estimate of emissions produced by the dam/pipeline.	Consider the indirect contributions of the dam/pipeline to greenhouse gas emissions.	18 (ES 1.5.16)	Section 18.1 and 18.2
	40.15	The views of the Iman people are not adequately reflected in the EIS.	Ensure the views of the Iman people are adequately reflected in the EIS.	22 (ES 1.5.20)	Chapter 22
	40.16	Concern about the cumulative impact of this development.	Undertake a cumulative impact study of all projects in the region	27 (ES 1.5.25)	Appendix A2-B Section 1.1
	40.17	Refer Issue 40.4 (identical)	Refer Issue 40.0 (identical)	N/A	Section 10.1 and 11.2
41	41.01	Connors River Dam and Pipelines EIS appears on some pages in the page footer - i.e. pages 28 to 33 of Chapter 27.	Amend text.	N/A	Appendix A2-B, Section 2.3
	41.02	The EIS and EMP refer to repealed legislation throughout the documents - e.g. Chapter 29, page 32; EMP - Environmental Protection Regulation (1998) instead of the Environmental Protection Regulation (2008).	Update document to reflect current legislation and subordinate legislation.	29	Section 1.5.3 Section 29.1
	41.03	Maps showing Fitzroy Basin are not the same area as shown in the Fitzroy Basin Water Resource Plan 1999 and Fitzroy Basin Water Resource Plan 2011 - i.e. Thompson Point is missing. Coal seam gas (CSG) industry impacts are not up-to-date throughout.	Remove reference to DERM - now Department of Natural Resources and Mines (NRM) or Department of Environment and Heritage Protection (EHP). Document should be updated, particularly concerning approvals and legislative requirements. Update maps of the Fitzroy Basin. Provide the latest information on CSG water options and/or other significant projects that impact on water sharing rules. Provide more detail regarding impacts of CSG water and other significant projects and how they link into the project – i.e. proposals to discharge treated associated water into the Dawson River and substitution of existing uses with CSG associated water.	14	Section 1.3.2, 1.4.2 Section 14.1.5

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.04	Throughout the document, little detail is provided in relation to compensation of existing water users, particularly unsupplemented water users who will, or could be, adversely affected by the project. Some water allocations in Class 13A and Class 13C that are currently upstream of the Glebe Weir ponded area may also be impacted by the Nathan Dam ponded area. If this is the case, impacts on members of these water advisory groups (WAGs) should be described. There is no information provided on the impacts of resumption on existing water entitlements tied to resumed land.	Provide details or options for water approvals (WAs) or water licences owned by the properties that are resumed. Will WAs be bought by SunWater prior to dam construction or sold to other users? Note that water licences will be converted to unsupplemented water allocation under the new resource operation plan (ROP). In relation to unsupplemented surface water, detail impacts and explain in more detail compensation options for the following water allocation groups: • Class 10A • Class 10B • Class 10C • Class 11A • Class 11B • Class 12A Provide detail about impacts on WAGs for Class 13A and 13C allocations. Provide details on resumptions and what will happen to existing water entitlements.	14	Section 14.3. Section 14.1.4.2 for Class 13A and 13B.
	41.05	There has been no mention in the EIS of clearance work being done with the relevant Aboriginal party prior to the commencement of construction work.	Clearance work should be conducted with the relevant Aboriginal party prior to commencing construction.	22	Section 22.1, 22.3 Appendix B29, Section 9.19
	41.06	Reference to *EPBC Act* threatened communities is incomplete. The Executive Summary should summarise key issues for the reader so 'The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin' should be included with the other *EPBC Act* threatened ecological communities.	Include 'The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin' in the list of threatened ecological communities in the Dam and Surrounds section (para 3).	28 (ES 1.5.8)	Section 28.1.4
	41.07	While the EIS states that "impacts to the flow regime directly downstream of the dam (at Nathan Gorge) will be varied, with the low-flow range improved to better mimic pre-development conditions, the medium-flow range moderately reduced and minor reductions to the high-flow range. The overall flow volume (on an annual basis) will decrease" little evidence is provided that demonstrates how this will be achieved.	Describe more completely what impacts the dam will have on in-stream flows – e.g. explain "moderately reduced" and provide evidence of how the stated outcomes will be achieved while providing the proposed yield. Also, references to details in the main text and appendices should be provided.	14 (ES 1.5.12)	Section 14.1.4.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.08	Sixth dot point states: "These impacts are not directly due to the construction of the dam but are more to do with the revised operational rules of the water supply scheme". The dam either does have an impact on medium priority users or it doesn't. It is unclear why the change in flows experienced by downstream users are not due to the dam but to changes in operational rules.	Explain why changed flows, likely to be experienced by medium priority users, is more due to changes in operational rules for the storages on the Dawson River than the construction and operation of the dam.	ES 1.5.12	Section 14.1.4
	41.09	Ninth dot point states: 'Appropriate compensation strategies for existing water users…irrigator groups' but no details are provided on what these strategies may entail.	Provide information regarding future compensation strategies. Outline the detailed options with regard to compensation strategies and the advantages and disadvantages of each option.	14	Section 14.3
	41.10	Same issue as section ES1.5.8. The Executive Summary should let the reader know about potential impacts on threatened ecological communities. While the proponent may disagree with the spring community listing, an EIS must be based on the latest credible information. Information about this *EPBC Act* listed threatened ecological community is publicly available and it is not appropriate to claim in the Executive Summary that impacts on it are not significant.	Include 'The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin' in the list of threatened ecological communities (paragraph 3).	28 (ES 1.5.26)	Section 28.1.4
	41.11	The first part of this section describes the various strategies but does not articulate the need for another dam. Section 1.3.3 claims that there is an excess of demand over-supply in the serviceable region and that the Nathan Dam supply could be used by the coal industry alone. Similarly, in Chapter 28 demand for the project is stated to be primarily in water supply to Surat Basin coal mines. However, section 28.2.7.2 of the MNES chapter claims that the dam does not have consequential actions under the EPBC Act assessment process, in the form of mining activity, because water for mines could be sourced elsewhere if the dam did not proceed. The dam is either needed, and therefore may have consequential impacts under the EPBC Act assessment process, or it is not needed.	Reconcile these two contradictory positions namely: 1. the dam is needed to provide water to mines and 2. the mining sector could source water elsewhere if Nathan Dam is not built, and therefore the dam does not trigger 'consequential impact' assessment (see section 28.2.7.2).	1.3	Section 1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.12	The information presented in this section is out of date as the strategy was completed in 2006. Also some of the recommendations, such as providing for conversion of medium priority water allocations to high priority water allocations in the Nogoa Mackenzie WSS - have been implemented. The Fitzroy ROP was amended to provide for this (see Fitzroy ROP) – Page 1-11 of EIS	Update information in this section.	1.3.1.3	Section 1.5.3.1
	41.13	Paragraph 6 refers to the moratorium in place for overland flow development in the Water Resource (Fitzroy Basin) Plan area. The effect of the moratorium is continued under the Fitzroy WRP 2011 – see section 31. Section 110 of the Fitzroy WRP 2011 provides for regulation of overland flow.	Take out the reference to the moratorium in relation to overland flow. The EIS should refer to the provisions under Sections 31 & 110 of the Fitzroy WRP 2011	1.3.1.3	Section 1.5.3.1
	41.14	This section refers to the CQRWSS information which is out of date. Also the Callide Valley Groundwater Area should be referred to as the Callide Groundwater Management Area as specified in the Fitzroy WRP 2011 (see section 7).	Update information based on provisions contained in the Water Resource (Fitzroy Basin) Plan 2011.	1.7.2, 14	Section 1.5.3.1
	41.15	The project is projected to impact on the Mount Rose Nature Refuge that was declared under the *Nature Conservation Act 1992*, but the conservation agreement for the refuge does not provide for this use.	The proponent should detail how it intends to change the declaration of the Mount Rose Nature Refuge to accommodate impacts from the proposed dam.	1.11	Section 9.3
	41.16	The EIS incorrectly states that the exemptions for the *Vegetation Management Act 1999* are under the *Nature Conservation Act 1992*, the *Land Act 1994* and the *Forestry Act 1959*. The correct exemptions are listed in Schedule 24 of the Sustainable Planning Regulations. The EIS incorrectly states that the clearing of any regulated regrowth vegetation will constitute operational works under Schedule 3 of the *Sustainable Planning Regulations 2009* which will require a development approval under IDAS. Clearing of regulated regrowth is controlled by the self-assessable Regrowth Vegetation Code. The EIS does not make reference to the need for approvals for operational works for quarry material in a watercourse.	Amend the section to accurately reference Schedule 24 of the *Sustainable Planning Regulation 2009*. Amend the section to accurately reflect the requirements for regulated regrowth. Amend the section to include reference to requirements for development permit for operational works for quarrying in a watercourse.	1.11.1.2	Section 1.5.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.17	The EIS has used the previous version of the Water Resource (Fitzroy Basin) Plan 1999 (WRP) to base assessments of potential impacts and compliance. The Fitzroy WRP 1999 has been replaced by the Fitzroy WRP 2011. The section states that modelling will be revised based on the new WRP prior to project approval. Note: NRM has offered to provide further comments on this section once the AEIS report is complete with reference to Water Resource (Fitzroy Basin) Plan 2011. New ROP model currently being developed.	Use the final Fitzroy WRP 2011 model as a basis for adding system operational rules to meet the Fitzroy WRP 2011 objectives.	14	Chapter 14
	41.18	The Fitzroy Basin Resource Operations Plan was amended last year, therefore should be referred to as Fitzroy Basin Resource Operations Plan (ROP) 2004 (amended October 2011, Revision 3). Paragraph 2 refers to the Fitzroy ROP identifying 190,000 ML of unallocated water for Nathan Dam. The Fitzroy WRP 2011 now provides for 90,000 ML of Unallocated Water held as strategic water infrastructure reserve on the Dawson River, specifically for Nathan Dam. The Fitzroy WRP 2011 provides strategic water infrastructure reserves in sections 44 and 45 - the EIS should refer to these sections. The reserve the 190,000 ML of unallocated water no longer exists	Update the section concerning the WRP, allocations and strategic reserves as outlined. Any water allocations described should include the stated reliability.	1.11.1.2	Section 14.1
	41.19	Consideration of SCL, potential impacts and mitigation measures are discussed in terms of the *Strategic Cropping Land Bill 2011* which was enacted before the EIS was published. The EIS should address the requirements of the Act.	Update the section referring to the *Strategic Cropping Land Act 2011.* Describe the potential changes to existing and potential land uses due to the construction and operation of the project. In particular, address impacts on potential SCL of the proposed pipeline route, the adjacent land uses and human activities associated with the project for the purpose of providing mitigation measures, including those required by the *Strategic Cropping Land Act 2011* and the *Strategic Cropping Land Regulation 2011.*	1.11.1.2	Section 1.5.3

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.20	The Queensland Government has developed the Queensland Biodiversity Offset Policy to increase the long-term viability of the state's biodiversity where residual impacts from development on an area possessing state significant biodiversity values cannot be avoided or minimised. While the BOP does not automatically apply to state coordinated projects, it may be applied in part or in full through the Coordinator-General's assessment process. To date, all development projects assessed by the Coordinator-General have been required to address the Biodiversity Offsets Policy. While reference is made to the Biodiversity Offset Policy later in the document, it should be listed here as it came into force on 3 October 2011. The policy would apply to both the dam and the pipeline.	Include reference to the Queensland Biodiversity Offset Policy and address its application to the project.	1.11.2.2	Section 1.5.3
	41.21	The pipeline traverses an area where remnant regional ecosystems are highly fragmented. The remaining remnant vegetation is tenuously connected through roadside corridors and drainage line vegetation making this remnant vegetation of high value in the landscape. This has not been taken into account in justifying the proposed location of the pipeline and associated works.	Consideration should be given to locating infrastructure outside road corridors and drainage lines where clearing will reduce the width of vegetation on the road corridor or drainage line to less than 50 m. The proponent should demonstrate how the proposed pipeline route minimises impacts on remnant vegetation particularly that located in corridors.	2.2.2	Section 1.4.1 Section 2.2.1
	41.22	The accumulation of linear clearing (including current infrastructure, this proposal and future proposals) will have an impact on the limited amount of native vegetation remaining in the landscape. As such the additional impact of temporary infrastructure associated with this project can be avoided and minimised by ensuring it is located outside the assessable vegetation. Temporary clearing areas may be rehabilitated however this does not restore the habitat and connectivity of the vegetation community to a suitable level for many years.	The location of the pipeline and associated infrastructures should avoid, minimise and mitigate impacts on the vegetation. Any temporary infrastructure (e.g. camps, material lay-down areas) should be located outside of assessable vegetation.	2.2.2	Part C
	41.23	Details of the fauna passages proposed as mitigation measures are considered inadequate. Finer scale conceptual designs of fauna passages need to be provided in the EIS to ensure they are fit for purpose.	Provide detailed designs of the fauna passages to provide greater certainty of the effectiveness of mitigation measures.	2.3.1.7 2.3.1.8	Section 2.1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.24	There is no mention of permit requirements in relation to the take of groundwater - e.g. dewatering during construction.	Include in Appendix 1D the following: 'Permits are required for the take of groundwater for construction purposes'.	2.4.1	Section 1.5.2.4
	41.25	While sections of the pipeline could be above ground, the majority of the pipeline will be buried and will require significant quantities of bedding material. The EIS has identified this requirement and has stated that suitable bedding material will be sourced from areas which appear to be outside watercourses. While it is noted that it is intended to source bedding material from the landscape, the EIS should state that sourcing sand and gravel from a watercourse requires statutory approval (for completeness and in case it is being considered as an alternative, as sources have not been fully identified).	Sources of bedding material and the means of transporting it to the pipeline construction site should be described. Any permits that may be required to obtain the bedding material and how these permits will be secured should also be outlined.	2.4.3.2	Section 2.2.3 Section 1.5.2
	41.26	The EIS states that with regard to disposal of surplus excavated material "when the available gully erosion areas have been exhausted, spoil excluding boulders will be spread and compacted by earthmoving machinery such that a gentle mound is formed over the easement. The stripped and stockpiled topsoil will then be spread over the completed mounds." Given the diameter of the pipeline (1200mm) there is potential for a considerable quantity of spoil material (>300,000m3) requiring disposal. More detailed soil testing is required to determine how much of this spoil will contain subsoils which may be difficult to dispose of. Also, topsoil would be required to rehabilitate the area cleared for the pipeline trench. It is not clear from where topsoil will be sourced for use over the created mound across the easement.	More detail is required about proposed safe disposal of spoil material and the source of additional soil needed for reclamation of the pipeline easement. Mounding of soil and excess fill on the pipeline easement, even if it is relatively stable material, may result in the diversion of overland flow resulting in erosion and loss of stability of the reclaimed area. Alternative means of disposal of this material which would have a low risk of causing erosion or contributing to excessive sediment load in runoff should be described.	2.4.3.2	Section 2.2.4 Section 6.2 Section 7.2.7.

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.27	For the ERAs required during construction the EIS does not specifically identify wastes associated with activities, nor does it identify specific emission points or emission profiles. The ERAs identified are: - ERA 8 Chemical Storage; - ERA 16 Extractive and screening activities; - ERA 14 Electricity Generation (if generating electricity by using fuel at a rated capacity of 10MW electrical or more); - ERA 15 Fuel Burning (if using fuel burning equipment capable of burning at least 500 kg of fuel in a hour); - ERA 33 Crushing, milling, grinding or screening (if crushing, milling, grinding or screening more than 5000 t in a year); - ERA 43 Concrete Batching (consists of producing 200t or more of concrete or concrete products in a year by mixing cement with sand, rock, aggregate or other similar materials); - ERA 56 Regulated Waste Storage (operating a facility for receiving and storing regulated waste for more than 24 hours); - ERA 61 Waste Incineration or Thermal treatment (including incinerating waste vegetation, clean paper or cardboard); and - ERA 63 Sewage Treatment (operating 1 or more sewage treatment works at a site that have a total daily peak design capacity of at least 21EP.	The EIS and EMP should describe each ERA including emission points and profiles to facilitate development approvals under the *Sustainable Planning Act* (2009).	2.4.8	Section 2.1.1
	41.28	The EIS proposes to rehabilitate the pipeline trench by "creating a shallow broad mound over the pipeline covering it with topsoil and revegetating with grasses". Care must be taken with the rehabilitation of the pipeline trench to avoid diverting overland flows. This option will not be appropriate on level plains subject to flood flows such as those between Warra and Dalby.	Restoration and rehabilitation methods should be revised to ensure there is no diversion of overland flow, particularly on flood plains and relatively flat landforms. Also management plans should include the need for inspection of the condition of the pipeline easement following heavy rainfall and flooding events to locate areas where remedial works are needed.	4.3.2	Section 2.2.4 Section 6.3 Appendix B6, Appendix B29 Section 9.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.29	The following soil properties and potential problems were noted as relevant to project works, including the pipeline: • sodicity and resultant dispersibility of soil materials –a potential problem in some Sodosols, Kurosols and Vertosols; • shrink-swell potential – a potential problem in Vertosols and some Sodosols; • salinity – a potential problem in Sodosols and some Vertosols; and • acidity – a potential problem in the deep subsoils of some Vertosols, in Kurosols, and in some deep sandy soils.	Detailed management strategies and options to address potential issues and risks concerning the disturbance of problem soils should be provided.	29, 6.1.4.2	Section 6.2 Section 29.3, Appendix B6, Appendix B29.
	41.30	"Jointing and hardness of all rock likely to be encountered is such that all materials, including some indurated, ferruginised sandstone beds up to 0.3 m thick, should be rippable with heavy machinery to allow trench excavation." Chapter 2 Section 2.3.2.1 states that there is a 45km section where it may not be possible to bury the pipe. There is potential for a pipeline located above ground to impact on surface water flows and management practices.	Confirm that the pipeline is to be buried along its entire length or identify those lengths where the pipeline is to be constructed above ground. Construction details for those sections where the pipeline will be above ground and the management strategies during operation should be specified e.g.details of the height of the pipeline above ground, how the pipeline will be crossed by people, vehicles and animals should be provided.	6.2.2.1	Section 2.2.5, 11.3.
	41.31	Sodicity and resultant dispersability of soil material has been identified in 6.1.4.2 (page 6-12). It is also mentioned that these soils may be used for gully filling and stabilisation works along the route of the pipeline. Inappropriate disposal of sodic material has the potential to affect landscape stability if it is not disposed of appropriately.	The use of excess trenching material for gully filling should be restricted to those areas of similar soil type (excess sodic material should only be placed in gullies in sodic areas). The EIS should detail how the gullies are to be stabilised and regenerated as well as the source of the topsoil to cover these areas. Detailed management strategies need to be included in the EIS showing the location of proposed gullies for filling and the strategy for regeneration and long term management at the identified sites.	6.2.2.2	Section 6.2 and 6.2.2. Appendix B6 Soil Management Protocols (Appendix F includes definitions)

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.32	The project must avoid and minimise any temporary or permanent impacts on potential SCL to the maximum extent possible within SCL Protection and Management Areas. The dam inundation footprint is located within the Western Cropping Zone of the SCL Management Area. Areas of potential SCL occur within the inundation zone, as shown in Figure 6-5. The pipeline footprint is also located within the Western Cropping Zone, and extends into the Southern Protection Area as well as the Management Area as shown in Figure 6-11, Figure 6-12 and Figure 6-13. The proposed dam constitutes both a Material Change of Use assessable against the relevant planning scheme and Operational Works (construction of a new dam which is assessed as a referable dam under the Water Supply (Safety & Reliability) Act 2008). The Strategic Cropping Land Act 2011 and State Planning Policy 1/12 require that projects must avoid and minimise any temporary and permanent impacts on SCL or potential SCL to the maximum extent possible. In a protection area if SCL or potential SCL cannot be avoided, only temporary impacts—where the land can be restored back to its pre-development condition—can proceed on the SCL or potential SCL and the development will be conditioned to ensure restoration of the land at the end of the development. If SCL or potential SCL cannot be avoided and is permanently impacted, the development can only proceed in demonstrated 'exceptional circumstances'. The EIS has not adequately addressed any temporary or permanent impacts of the dam construction and inundation and the pipeline construction on SCL and potential SCL within the Protection Area and Management Area, and therefore, has not described attempts to avoid and minimise these impacts	The project will need to more comprehensively address the requirements of the *Strategic Cropping Land Act 2011* and *State Planning Policy 1/12.* There are two pathways available to the proponent regarding the assessment of strategic cropping land: 1. Accept the trigger map and have the land identified as potential strategic cropping land treated as though it is strategic cropping land; or 2. Undertake a validation assessment to determine whether or not the land meets the strategic cropping land criteria requirements. The EIS should indicate the process that that will be followed to achieve compliance with the SCL Act and SPP. The EIS should provide sufficient information to demonstrate how the project will comply with the *Strategic Cropping Land Act 2011* and meet the requirements of *State Planning Policy 1/12* and include a report which: • assesses the development's impact on all SCL or potential SCL on the land; and; • identifies any constraints on the configuration or operation of the development;	6.2.4	Section 1.5.3.3 (re SCL Act) and 1.5.3.4 (re SCL SPP). Section 7.1.2 discusses both SCL and SPP.

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.33	Continuation of Issue 41.32	• identifies the extent of the impact of the carrying out of the development activity on SCL; • addresses how the development activities have avoided and minimised the impacts of the proposed activities on SCL or potential SCL. If components of the proposed development are to have a temporary impact on SCL or potential SCL, also include: • evidence that the development components are a temporary impact • the date that the development components will cease and be removed • a restoration plan detailing how the impacted SCL or potential SCL will be restored to its pre-development condition • the timeframe in which the restoration will be completed.	6.2.4	Section 1.5.3.3 and 1.5.3.4. Section 7.1.2 discusses both SCL and SPP.
	41.34	It is important for the public and travelling stock to maintain their right to use roads and stock routes during the construction and operation of the proposed dam and pipeline. It is unclear from the EIS if there is to be any temporary or permanent restriction on the public or stock movement as a result of the construction or operation of the proposed dam and pipeline. Background Roads are administered under the Land Act 1994; however roads are managed on a day-to-day basis by the local government, or in the case of State-controlled roads, by the Department of Transport and Main Roads. Under the Land Protection (Pest and Stock Route Management) Act 2002, the administration of the stock route network (SRN) is shared between local government and the Department of Natural Resources and Mines. Local government is responsible for day-to-day management, while DNRM is responsible for providing the framework of legislation and policy for stock route management and support for local governments.	Any impacts of the project on the use of roads and stock routes should be identified. Where the impacts are temporary, appropriate mitigation should be described. Where there are to be permanent disruptions to the stock route network, NRM requires realignment/replacement of corridors of similar width and suitable country type to allow for the uninterrupted flow of travelling stock. Current classifications of stock routes have no bearing on whether consideration needs to be given to their replacement/realignment – future usage of stock routes by travelling stock is subject to change.	7.1.1.2	Section 7.3.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.35	Under Section 362 of the *Land Act 1994*, the Minister's written approval for an easement over land granted in trust or non-freehold land (including any lease of non-freehold land or sublease of a lease of non-freehold land), other than a road, must be obtained prior to any activity commencing on such land. The minister cannot consider any easement until the details of the easement are known including but not limited to: • whether approvals under other Acts to hold and construct the pipeline are obtained; • whether any required easements are to be benefited/burdened easements, or proposed to be public utility easements; • if proposed to be public utility easements, whether the proposed grantee is a public utility provider; • the leased land the subject of the proposed easement.	Proposed easements will cover land administered under the *Land Act 1994*. Therefore the proponent must meet the provisions of the *Land Act 1994* on land administered under the *Land Act 1994* prior to any activity being carried out. Details of the proposed easements should be provided to enable a determination to be made of whether proposed easements could be approved as part of the EIS assessment.	7.1.1.2	Section 7.1.3
	41.36	The EIS needs to describe the potential changes to existing and potential land uses due to the construction and operation of the project. The EIS provides a description of SPP1/92 and SPP1/03 as the potential SPP's applicable to this project. The EIS provides comments on the impacts of the project on SPP 1/03 however, there is inadequate information on the impacts on SPP1/92 nor is SPP1/12: Protection of Queensland's Strategic Cropping Land mentioned or addressed.	Describe impacts of the project in relation to SPP1/92 and on SPP1/12. Impacts on SCL or potential SCL of the proposed dam and pipeline route, the adjacent land uses and human activities associated with the project for the purpose of providing mitigation measures, including those required by the State Planning Policy 1/12: Protection of Queensland's Strategic Cropping Land (for planning a development assessment under the Sustainable Planning Act 2009.)	7.1.2.1	Section 1.5.3 Section 7.1.2 Section 7.1.4 Section 7.2.1
	41.37	Agriculture is the predominant existing land use for the project area but there is little information provided in the EIS on the type, nature, extent and other aspects for both the dam and pipeline.	Details of existing agricultural activities, their type, extent and other relevant aspects need to be described in the EIS. This should be provided for both the dam and pipeline.	N/A	Appendix A2-B Section 1.3
	41.38	The EIS states that tobacco is an existing land use along the water distribution pipeline route. Tobacco has not been grown in the region since the late 1970s.	Remove reference to tobacco.	N/A	Appendix A2-B Section 1.3

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.39	The EIS must assess impacts on stockroutes.	Recommended amendments to the EIS: • where there are to be disruptions to the stock route network, it is a requirement to realign/replace corridors of similar width and suitable country type to allow for the uninterrupted flow of travelling stock; • the stock route network comprises declared stock routes, reserves for travelling stock and other relevant land; • options for permanent or temporary diversions of stock that are considered unsafe to travelling stock and drovers, as well as the travelling public will not be supported; • the relevant Senior Lands Officer (Stock Routes) and local government stock route officer must be consulted from the early planning stages; • current usage classifications of stock routes have no bearing on whether consideration needs to be given to their replacement/realignment – future usage of stock routes by travelling stock is uncertain; • where there are to be temporary disruptions to travelling stock (e.g. from the installation of buried infrastructure), suitable arrangements to mitigate the disruptions must be negotiated with the relevant local government prior to the commencement of works; • the entire stock route network is to be retained – closure is not an option; • the provision of adequate watering facilities and other infrastructure may be necessary, particularly where existing infrastructure is to be made redundant.	7.2.1.5	Section 7.3.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.40	The EIS has not identified the precise location of the pipeline which limits department's ability to assess the impacts of the proposal. For example, for Area 3 - Is the route to be on the northern side of the Western Railway line reserve - i.e. in agricultural land? Or is it to be on the northern or southern side of the Warrego Highway reserve?	The EIS should identify the following: • the location of the pipeline; • the fate of all excess material within Area 3. It would be appropriate for this material to be removed from the pipeline easement other than that quantity needed to fill the pipeline trench following settlement; • there are a number of strategic gullies within Area 3 that need filling. These gullies are all within close proximity to the proposed pipeline route. Management plans for the filling of these gullies, their revegetation and their management post-filling need to be developed and form part of this EIS; • there are numerous under-rail drainage points within Area 3. Management plans for these drainage points need to be developed and form part of this EIS. Where possible, and provided impacts can be minimised, the pipeline should be co-located in existing or planned infrastructure impact areas as far as is practicable (notwithstanding the potential for significant impacts on remnant vegetation and other high environmental values in some locations).	7.2.2	Section 2.2.1 Section 7.2.2 Section 7.2.6
	41.41	In Area 3 the pipeline crosses a large area of floodplain and numerous drainage points associated with the Western Railway and Warrego Highway corridors.	Address the following: • identify what additional works will be undertaken at those drainage points to ensure the stability of the drainage lines; • identify gullies will be filled in the event that there is excess soil from the trenching operations; • ensure that those gullies are stabilised and grassed appropriately; • management plans are needed for the aftercare of those gullies.	7.2.2	Sections 7.2.2 and 7.2.6. Section 6.2.2. Section 16.7.4. Part C sections 2.3.1 and 2.3.2. Appendix B-6.
	41.42	If the pipeline is to be located for sections between Wandoan and Chinchilla, specific mitigation and management measures are needed. There are no details on these aspects in the EIS.	Address the following: • how this may impact on local runoff and its impact on the local soil types; • long term provisions are to be put in place for any remediation works.	7.2.2.2	Section 7.2.2 and Appendix B6
	41.43	The EIS states: "Where the predominant land use is cropping (Chinchilla to Dalby), impacts will be negligible as the pipeline will be underground and located within or adjacent to the Warrego Highway road reserve." However, impacts during construction (including access tracks) and longer term remediation works that would be needed have not been considered.	Address the following: • where these works will need to be reconstructed; • what long term provisions are to be put in place for any remediation works in the event of soil settlement; • the potential for the pipeline to interfere with existing irrigation infrastructure (head ditches etc.)	7.2.2.2	Section 7.2.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.44	The EIS is not clear on the location of the pipeline in Area 3 between Chinchilla and Dalby.	Clearly indicate whether and where the pipeline in this area is to be located: • in private property adjacent to but south of the Warrego Highway transport corridor; • adjacent to the southern fence line but within the Warrego Highway transport corridor; • adjacent to the northern fence line but within the Warrego Highway transport corridor; of • in private property adjacent to the northern fence line of the Western Railway corridor. The EIS should include information on the criteria used to locate the pipeline in the area, and also how this location meets requirement to avoid, manage and mitigate impacts on environmental values in the area.	7.2.2.4	Section 7.2.6 Section 2.2.1 Part C
	41.45	The EIS must assess impacts on stockroutes.	Recommended amendments to the EIS: • where there are to be disruptions to the stock route network, it is a requirement to realign/replace corridors of similar width and suitable country type to allow for the uninterrupted flow of travelling stock; • the stock route network comprises declared stock routes, reserves for travelling stock and other relevant land; • options for permanent or temporary diversions of stock that are considered unsafe to travelling stock and drovers, as well as the travelling public will not be supported; • the relevant Senior Lands Officer (Stock Routes) and local government stock route officer must be consulted from the early planning stages; • current usage classifications of stock routes have no bearing on whether consideration needs to be given to their replacement/realignment – future usage of stock routes by travelling stock is uncertain; • where there are to be temporary disruptions to travelling stock (e.g. from the installation of buried infrastructure), suitable arrangements to mitigate the disruptions must be negotiated with the relevant local government prior to the commencement of works; • the entire stock route network is to be retained – closure is not an option; • the provision of adequate watering facilities and other infrastructure may be necessary, particularly where existing infrastructure is to be made redundant.	7.2.2.5	Section 7.3.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.46	There are three springs located within 100 m of the centre of the proposed pipeline alignment. Issues of avoiding, minimising and/or off-setting the impacts of the pipeline on the springs have not been sufficiently addressed in the EIS.	Identify and document the locations and potential impacts on the springs, as well as measures taken to avoid impacts. Where they cannot be avoided, provide information about the mitigation measures that would be applied.	9	Section 9.2
41	41.47	According to Figure 9-1 the project will impact on part of the Mount Rose Nature Refuge but the extent of this impact, what means have been taken to avoid any impacts and what mitigation measures are proposed was not provided.	Details of the projected impacts on the Mount Rose Nature Refuge should be provided including the area affected, measures taken to avoid impacts and what offsets will be provided for any impacts that cannot be avoided.	9.2.1	Section 9.3 and Appendix B1-B
	41.48	The environmental values (EVs), water quality objectives (WQOs) and management intent/condition assessments of the Upper and Lower Dawson aquatic ecosystems which may be impacted by the Nathan Dam have been specified under Schedule 1 of the Environmental Protection (Water) Policy 2009 (not 1997 as currently indicated in this section) and associated plans.	Refer to and consider the most recently released policies and plans relevant to aquatic ecosystems potentially impacted by the project including but not limited to: • Environmental Protection (Water) Policy 2009 o Schedule 1 – Dawson River Sub-basin Environmental Values and Water Quality Objectives September 2011 including the associated Upper Dawson and Lower Dawson Plans and the Groundwater Plan. o Schedule 1 – Fitzroy River Sub-basin Environmental Values and Water Quality Objectives September 2011 and the associated Fitzroy Plan and the Groundwater Plan. Refer to the Fitzroy scheduled EVs and WQOs page on the EHP website. Illustrate (using maps) and describe the zone of influence of the project on aquatic ecosystems both upstream, downstream and within the zone of influence of the construction and operational footprints with respect to the management intent/condition assessment for aquatic ecosystems described in Schedule 1 of the Environmental Protection (Water) Policy 2009 and relevant plans. In particular, identify any high ecological value aquatic ecosystem which may be affected by the construction and/or operation of the dam (flow and water quality) such as HEVm2173. The water quality objectives to protect HEV aquatic ecosystems for water quality (20th, 50th and 80th percentiles), habitat, biota, flow and riparian areas will need to be considered and water quality objectives derived if necessary where there is insufficient data. Refer to the Queensland Water Quality Guidelines (2009) regarding the minimum water quality data set required to derive local 20th, 50th and 80th percentiles for any potentially affected HEV.	9.3.1	Section 9.1.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
41	41.49	The likely impacts of climate change, including longer periods of no flow or low flows, have not been fully considered in the EIS.	Carry out a dry spell analysis for in-stream and riparian (over bank) areas based on the WRP/ROP rules to demonstrate the changes likely to occur as a result of the dam. The dam design, operational rules and water offtake to the south are needed to model compliance with the WRP.	9.5.3	Section 14.1.4.7
	41.50	Proposed likely impacts of climate change on the Fitzroy River Turtle - impacts on nesting success and possibly male to female ratio of offspring, as well as longer periods of no flow or low flow has not been addressed. The timing and flow rate of releases to downstream water storages should be well known. This issue relates to the need for modelling described in the previous point to demonstrate compliance with WRP	Direct and indirect impacts of climate change on the Fitzroy River turtle should be identified and discussed in the EIS. Address the impacts of releases to downstream water storages on the nests (sand banks), nesting behaviour and food availability of the Fitzroy River turtle.	9.5.3	Section 28.1.3
	41.51	Several references are made to a Construction Environmental Management Plan, a Weed Management Plan and an Environmental Management Plan in general terms. Additional detail is required in the EIS on what will be included in these management plans and how they relate to management measures in the environmental management plan.	Include the Construction Environmental Management Plan, the Weed Management Plan and any other Management Plans that are referred to in this report in the EIS.	10	Chapter 29 Appendix B29
	41.52	Paragraph 1 states: "The provision of an offset will be assessed under the Policy for Vegetation Management Offsets Version 2.4 (DERM, 2009)." This policy has been superseded by the Policy for Vegetation Management Offsets (Version 3, 2011).	Amend the section to reflect new version of the Policy for Vegetation Management Offsets (Version 3, 2011).	10.1.1.2	Section 1.5.3
	41.53	Paragraph 2 states: "Assessment may also be required against the Regrowth Vegetation Code (Version 1, 2009)." This code has been superseded by the Regrowth Vegetation Code (Version 2, 2011)	Amend the section to reflect new version of the Regrowth Vegetation Code (Version 2, 2011).	10.1.1.2	Section 1.5.2.6

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.54	This section states: "It should be noted that field work was not undertaken for portions of the proposed pipeline between 90 and 110 km, 120 and 130 km, and 130 and 160 km. For these sections the desktop review was utilised". Further explanation should be given as to why these areas were excluded from a planned field assessment program.	Explain why portions of the proposed pipeline route did not have field work undertaken and the implications for identifying potential impacts.	10.1.2.4	Section 10.1
	41.55	Section 28.3.4.2 states that 'SunWater has reviewed the relevant literature regarding Great Artesian Basin springs …'. If this is the case, this section should state clearly why the information the EIS uses is more relevant than the current knowledge of the distribution of springs in the area – in particular the EHP springs database. It is valid to refer to old data in certain contexts, but not under the terms of reference for an EIS. The state government maintains a database of GAB springs which would provide the most up-to-date information about spring locations. The database shows that the listed community does occur in the dam footprint. Up-to-date information is also contained in the Recovery Plan and the recently released Draft Underground Water Impact Report for the Surat Cumulative Management Area by the Queensland Water Commission.	The EIS should be amended to use the most up to date information on the distribution of GAB springs in the project area.	10.1.2.6	Section 28.1.4
	41.56	The EIS indicates differences between the vegetation mapping undertaken for the project and the Herbarium's vegetation mapping used in the Vegetation Management Act 2000. No process is described for how these differences will be resolved. This will need to occur prior to lodgement of the application for the Development Approval to Vegetation Management in NRM. The proponent could apply for a Property Map of Assessable Vegetation to change the RE mapping if any inaccurate mapping data is identified.	The EIS should describe how the proponent will resolve the identified vegetation mapping issues prior to lodgement of applications.	10.1.3.2	Section 10.1.1
	41.57	This section is incorrect according to the EHP springs database. There are a number of springs within the FSL (see Figure 10-8.) that are mapped as EPBC Act listed springs in various documents, including the EHP springs database, and the section should show this.	Include the GAB springs threatened community in this section.	10.1.3.4	Sections 10.1 and 28.1.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.58	The location of the pipeline from Chinchilla to Dalby will substantially impact State Significant Biodiversity Values occurring in road reserves and stock routes as identified within the Brigalow Belt South Biodiversity Planning Assessment v1.3 expert panel decision brbs_l_09. This indicates a value of stock routes and associated reserves in fragmented subregions such as Eastern Darling Downs. Stock routes and associated camping and water reserves provide critical connectivity in fragmented landscape. They also offer opportunities to restore habitat and connectivity in highly cleared landscapes. The pipeline as currently planned will highly impact this remaining link of connectivity within the landscape along the Dalby Chinchilla section of the Warrego highway. This EIS has also identified the values of this section of road with the location of high precision records being included in this EIS (Figure 10-10) Picris aborarum, Rutidosis lanata, Thesium australe. The EIS should recognise that the grasslands and associated areas in stock routes and other reserves are of high value, as demonstrated by the occurrence of listed species being present, and that this project will need to avoid any impacts within these areas for these values to be protected.	Detail options for avoiding areas having high values and offsetting requirements for areas that cannot be avoided.	10.1.4	Section 10.2.1
	41.59	Mapping (Figure 10-10) references Picris aborarum in the legend. As a part of this EIS review we were unable to find any reference to this species. This may be due to an error in database or that this species has been reclassified post the species being collected, as internal species database reference Picris barbarorum	Investigate the origin of this information related to this species. Update the EIS as required.	10.1.4.7 (Figure 10-10)	Section 10.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.60	It is noted that the proponent intends to prepare an Environmental Offset Strategy for the project that meets requirements of Policy for Vegetation Management Offsets under the Vegetation Management Act 1999 ('VM Act') and Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) requirements and indirectly, the Biodiversity Offsets Policy. However, it is not clear how the requirements of these three policies combined will be met by the proposed EOS. This is needed as there are particular aspects of the BOP and the other offset policies and requirements which differ and would need to be specifically addressed. For direct offsets, the VM offset policy requires that the offset area, legally binding mechanism and offset area management plan be assessed prior to approvals being given. Section 5 of the Policy for VM offsets lists information requirements that should be addressed in an EIS.	Details on the proposed EOS should be provided that would demonstrate how the requirements for offsets will be met. This strategy should outline the proposed methods that will be adopted in order to address these requirements and provide detail about offsets in relation to the criteria and information requirements.	10.4	Section 10.2.4
	41.61	Paragraph 4 states: "Elements of the proposed clearing will be subject to the provisions of the ……. specific-issue Policy for Vegetation Management Offsets (DERM, 2009) including provision for limiting clearing and minimising impacts on watercourses, connectivity, soil erosion, salinity, endangered and of concern REs, essential habitat and threshold REs." This policy has been superseded by the Policy for Vegetation Management Offsets (Version 3, 2011).	Amend the section to reflect new version of the Policy for Vegetation Management Offsets (Version 3, 2011).	10.2.1.1	Section 1.5.3

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.62	Prior to the lodgement of the application to Queensland Government - Vegetation Management Unit, to clear native vegetation, the applicant, if applicable, should seek confirmation that the project has been determined to be a Significant Community Project ('SCP') pursuant to section 10(5) of the VM Act. Please note a declaration of the project being a Significant Project ('SP') under section 26(1)(a) of the SDPWO Act does not automatically make the project an SCP. The applicant should address and meet the following criteria: a. The project must meet any one of the following categories: 1. Provides an aesthetic, conservation, economic or cultural benefit to the local or regional community or the State; or 2. Serves an essential need of the community; or 3. Significantly improves the community's access to services. b. The project must meet all of the following considerations: 1. A project that has specific locational requirements. Hence there is a community need for the project, the location is appropriate based on the project context, and there are no reasonable alternative locations for the project to be located in; 2. The project benefits are not speculative. Hence the benefits of the project proposals are realistic and supported by evidence; 3. The benefits of the project are significant to the relevant community (whether local, regional or State community), and the benefits are enduring or long term; and 4. The project is predominately for the community benefit, and not predominately for other purposes. Furthermore, the benefits are significant to the community and not merely a limited number of people. Please note: Only interests based solely on the merits of the project and no other ancillary interests / merits regarding the project will be considered in the Assessment.	SunWater should, as a matter of priority and prior to lodgement of the application for the Development Approval to Vegetation Management in NRM, seek a determination by Queensland Government - Vegetation Management Unit, as to whether or not the project can be determined to be a Significant Community Project ('SCP'). Information needed to obtain this determination should be included in the EIS.	10.4.1	Section 1.5.2
	41.63	Compliance of this project in relation to the Queensland Biodiversity Offset Strategy (QBOP) has not been adequately addressed. Background and situation: The Nathan Dam Environmental Impact Statement (EIS) report has provided information on how plans have been put into place to avoid and minimise environmental impacts. The EIS report also states that in the cases where this is not possible,	A detailed and comprehensive assessment of the impacts of proposed activities on SSBVs as identified in Appendix 1 of QBOP is required to formulate an offset package. A detailed offset package should address the following criteria, located on pages 25 to 27 of the QBOP: • A3. 'General assessment requirements':	10.4.1	Section 10.2.4 Appendix B1-B

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
		environmental offsets will be considered. The Coordinator General may take the Queensland Biodiversity Offset Policy (version 1) DERM, 2011 (QBOP) into account when assessing projects. In the EIS report for this project, the proponent states that compliance with the Policy of Vegetation Management Offsets (PVMO) and the EPBC Act requirements may largely satisfy the requirements of QBOP (Section 10.4, page 10-94). QBOP states that for significant projects the Coordinator General may require offsets for impacts not currently covered by a specific-issue offsets policy. QBOP requirements: Information provided in the Nathan Dam and pipeline proposal indicates that the proposed development may impact on several State Significant Biodiversity Values (SSBV) as defined under Appendix 1 of QBOP. A review of the EIS indicated that the following SSBVs as occurring on the area associated with the development application: • Remnant Regional Ecosystems (Endangered and Of Concern) • High Value Regrowth Regional Ecosystems (Endangered and Of Concern) • Critically limited Regional Ecosystems • Remnant Endangered and Of Concern Grassland Regional Ecosystems • Essential Habitat species • Watercourses and their associated Regional Ecosystems • Springs (GAB) – these are numerous in the area/vicinity • Protected animals • Protected plants Please note that further detailed assessments, including field surveys, may detect additional SSBVs that may be impacted as a result of the proposed development. Offsets will be required for impacts on SSBV that have not been dealt with under the Policy for Vegetation Management Offsets (VM Act) or by offsets requirements under the EPBC Act (Cwth).	These requirements must be addressed by all applicants: a. how the development has been designed and located on the lot/s to avoid and minimise the extent of impact; b. tenure of the impact area • A3. 'Specific Requirements for Offset Proposals': a. details of how the criteria contained in this policy have been met; b. tenure of offset area; c. details of any rights to take forestry products; d. details of any mining encumbrances, including exploration permits ; e. an analysis of the proposed location of the offset area in relation to existing and future land uses, and the implications of the land use on the offset area's long-term viability. Matters to be considered as part of the analysis include: i. zoning and regional land-use category (if available) of the offset area and surrounding area under the local government planning scheme and regional plan produced either under the repealed Integrated Planning Act 1997 or Sustainable Planning Act 2009; ii. maps spatially identifying the current and potential future land-uses, including proposals for major infrastructure, mining, petroleum and gas activities on or in the general vicinity of the offset area; iii. threatening processes which may impact on the effectiveness of the management actions on the proposed offset area • A3. Any other specific requirements as relevant to the application, including but not limited to 'Specific requirements for mining or petroleum and gas activities', 'Specific requirements for protected plants', 'Specific requirements for protected animals' A copy of the QBOP can be found at the following website http://www.derm.qld.gov.au/environmental_management/environmental-offsets/index.html.		
41	41.64	Several references are made to a Weed Management Plan, a Pest Management Plan and a Fire Risk Management Plan. This information ideally should have been included in this EIS report.	Details of the Weed Management Plan, the Pest Management Plan, the Fire Risk Management Plan and any other Management Plans referred to in this report should be provided, particularly implementation and remediation requirements.	29	Section 29.7

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.65	There will be potentially 45 km of pipeline above ground. Impacts and mitigation measures on fauna have not been adequately addressed.	Describe mitigation of fauna passage impacts where linear infrastructure will be a potential disruption.	11.2.2.2	Section 11.3
	41.66	It is unclear how SunWater 'intends protecting areas of downstream riparian habitat' for relocated snails.	Outline actions that will be taken to secure the permanent protection of riparian habitat of known populations and translocated populations of snails.	11.2.1.3 (Table 11-19)	Section 28.1.2, Table 28-1. Appendix B1-B.
	41.67	Queensland Wetland Mapping identifies 10 wetlands that will be inundated or partially inundated by the proposed dam. The EIS does not provide evidence that any of the wetland sites were surveyed. 14.2.3.2 Downstream flooding states: 'The impact to wetlands and floodplains is discussed in detail in Chapter 12'. Wetlands are not covered adequately in Chapter 12. More detail is found in chapter 13 Flood plain wetlands (13-11). Chapter 13 (13-11) gives passing mention to wetland typology: 'Existing wetlands within the Nathan Dam full supply level (FSL) water storage are artificial riverine wetlands (created by the construction of Glebe Weir) and palustrine wetlands (wetlands dominated by persistent emergent vegetation where water in the deepest part of the basin is less than 2m deep); predominately 'tree swamps' (Melaleuca/Eucalypt), although very small patches 'grass swamp' also occur. Palustrine wetlands (both tree and grass swamps) and small artificial wetlands (farm dams) are also found abundantly outside of the water storage, along with several floodplain lakes.' The Regional Ecosystem Database (REDD) identifies 11.3.27 as: Freshwater wetlands - Vegetation is variable including open water with or without aquatic species and fringing sedgelands and eucalypt woodlands. Occurs in a variety of situations including lakes, billabongs, oxbows and depressions on floodplains. This Regional Ecosystem (RE) has the Biodiversity Status 'of concern' and is listed as 'least concern' by the Vegetation Management Act 1999. Wetlands provide important habitat for a variety of aquatic flora and it is reasonable to expect that the wetlands may provide refuge for flora and fauna not found in the creeks that were surveyed.	Survey the wetlands that will be impacted by the project using best practice guidelines. Where impacts cannot be avoided or mitigated, provide relevant offsets.	12	Section 9.1.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.68	Wetlands are generally regarded as sensitive aquatic environments. While wetlands of national significance and RAMSAR wetlands are referenced (Chapter 9 – Sensitive Environments, page 9-14) there is little reference to wetlands other than creeks and rivers in either the dam and surrounds area or in the pipeline corridor, or impacts associated with traversing wetlands identified in Queensland Wetland Mapping. Section 12.1.3.1 (Distribution of waterbody types) indicates that in the Dam area and surrounds: "Baseline surveys included searches for off-stream waterbodies ('wetlands' or constructed dams), however, none were located." However there is no comment regarding the pipeline route. The finding of "none were located" is contradicted in 13.1.3.1 Aquatic habitat - Floodplain wetlands (Page 13-11) which indicates a map of wetlands within the Nathan Dam footprint and surrounds is presented in Figure 13-6. However there is no comment on the quality of these wetlands. 13.1.4.1. Aquatic habitat - Floodplain wetlands states: "No floodplain wetlands were surveyed in the pipeline study area."	Identify and document any wetlands as defined by Queensland Wetland Mapping within the dam and surrounds and the pipeline route. The aquatic flora of the sites which are likely to be impacted both in the dam surrounds area and the pipeline route should be reviewed.	12.1 13.1	Section 9.1.1
	41.69	Queensland Wetland Mapping identifies 10 wetlands that will be inundated or partially inundated by the proposed dam. Table 13-3 Sites surveyed for aquatic fauna during the 2007/2008 pre-wet and post wet season - surveys do not indicate that any of the wetlands were surveyed for aquatic fauna. Wetlands provide habitat for a range of fauna particularly birds and can act as important refugia during the dry season.	Survey wetlands to determine their importance as refugia for wetland fauna. Where impacts cannot be avoided or minimised provide relevant offsets.	13	Section 9.1.1
	41.70	Two exotic species, mosquito fish (Gambusia holbrooki) and goldfish, (Carassius auratus) were recorded in the study area in 2008. Subsequently there have been incursions of the exotic pest fish Tilapia in this catchment since the commissioning of the fish surveys in 2008. This is an important risk to the health of the impoundment itself.	Describe the spread of Tilapia in the Fitzroy Basin and identify threats posed to the ecology of the impoundment and mechanisms to reduce transfer of this species.	13.1.3.3	Section 13.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.71	There is a brief discussion of turtle movement and migration in Section 13.1.3.4 Aquatic reptiles - turtles EIS, which includes comments on the likely movement of turtles being driven by seasons. If this is the case, then the operation of the proposed turtle way would need to coincide with the movement of turtles. This may have implications for the flow release regime from the dam as the turtle way would need to provide an aquatic environment for the turtles. While the dam impoundment itself will impact on existing turtle nesting habitat, the extent of these impacts due to increased flooding upstream of the impoundment due to the dam has not been described. As the design of the proposed fish transfer system for the dam is not described, it is unclear if the device will be suitable for the movement of small fish, which many of the native fish are, across the dam wall.	Additional information on the timing of movement of turtles in the Dawson River is needed to ensure the proposed turtle way is effective as possible. Implications of water needs from the dam for operation of the turtle way have to be considered in the flow release strategy and ultimately the ROP. Provide information on the extent of changes in the frequency and extent of flooding upstream of the impoundment is likely to impact on turtle nesting habitat. Provide details of the proposed fish transfer device and describe how the device will provide for the transfer of small native fish species.	13.2.1.2	Section 2.1.2 Section 13.4 Section 13.5 Section 13.6 Section 13.7 Section 28.1
	41.72	Catchments generally contain populations of flora and fauna which are genetically specific to a particular catchment. This section refers to the potential for introduction or increase of translocated, exotic and noxious fauna via the pipeline. That is, organisms may be drawn into the pipeline at the dam and transferred along its length to the receiving environment. The consequences of transfer of aquatic fauna are considered to be negligible as the only two exotic species recorded in the Project area (mosquito fish (Gambusia holbrooki) and goldfish, (Carassius auratus)) are already well established within the Condamine catchment (DPI, 2008). It is noted that there is no intention to discharge other than through a filtered water supply route at the receiving end. There is a however a reasonable probability that biotic organisms (including eggs, cysts, spores and pathogens could be transferred in unfiltered water and be available to other potential users along the pipeline in the future. In order to safeguard this eventuality, water filtering (using sand-bed filters) prior to transmission of the water into the pipeline would considerably reduce the potential of spread for pathogens and pest species.	Identify and employ mechanisms to filter raw water prior to transfer to an adjacent catchment, to reduce the probability of the transfer of non-indigenous or pest organisms. It is recognised that while there are no mechanisms planned to enable release of raw water into the aquatic environment, there is a distinct possibility that unfiltered raw water could find its way into Condamine catchment aquatic environments through unforeseen mobile (water trucks) discharges or the installation of additional outlets for rural or agricultural use.	13.2.2.1	Section 2.2.2 Section 13.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.73	As this chapter is based on the previous Water Resource (Fitzroy Basin) Plan 1999 (WRP) it is unclear if the project will meet the requirements of the Fitzroy WRP 2011 and the revised Resource Operating Plan - Fitzroy Basin ROP 2004 (amended July 2009, Revision 2).	Update Chapter 14 to demonstrate compliance with the Fitzroy WRP 2011 and the revised Resource Operating Plan - Fitzroy Basin ROP 2004 (amended July 2009, Revision 2).	14	Section 14.1
	41.74	The EIS has used the previous Water Resource (Fitzroy Basin) Plan 1999 (WRP) to base assessments of potential impacts and compliance. The Fitzroy WRP 1999 has been replaced by the Fitzroy WRP 2011.	Update information based on the Fitzroy WRP 2011 provisions.	14.11.2	Section 14.1.2
	41.75	This section references the Fitzroy Basin ROP 2004 (amended July 2009, Revision 2). This version of the ROP is outdated. The latest Fitzroy ROP was amended as at October 2011, Revision 3	Change the ROP reference to Fitzroy Basin Resource Operations Plan (ROP) 2004 (amended October 2011, Revision 3). Note that a new ROP is under development to implement the strategies contained in the Fitzroy WRP 2011.	14.1.1.3	Section 14.1.3
	41.76	Paragraphs 2 & 3 refer to unallocated water amounts specified in the ROP. The new WRP now provides for 90,000 ML of Unallocated Water held as strategic water infrastructure reserve on the Dawson River	Refer to the new provisions (Subdivision 4 Section 44 and 45) for unallocated water in the new Fitzroy WRP 2011 relating to Nathan Dam. Yield projections from the project need to be updated.	14.1.1.3	Section 14.1.2
	41.77	The EIS states in the above section that Nathan Dam was identified in the CQRWSS as the preferred medium to long term water supply solution. This is incorrect.	Change text to short to medium term water supply solution as per the CQRWSS.	14.1.1.4	Section 14.1.3.2
	41.78	Environmental Flow Objective reporting nodes have been reduced in the Fitzroy WRP 2011. Also the Fitzroy WRP 2011 AMTDs for nodes 4 and 1 (see Schedule 5 part 3) are different to the AMTDs provided in the EIS.	Update the section to reflect information provided in Fitzroy WRP 2011.	14.1.2.1	Section 14.1.4.2 and Table 14-20 in Section 14.1.4.3
	41.79	Information provided is from an old model and scenario runs. The Fitzroy WRP 2011 was developed using an updated model. Calculation of EFOs and WASOs from modelling outputs has also changed significantly from the old model.	Update section to reflect information provided in Fitzroy WRP 2011. Use the final Fitzroy WRP 2011 model and associated programs as a basis for adding system operational rules to meet the Fitzroy WRP 2011 objectives. Scenario information in the model can be found in the hydrology report.	14.1.2.2	Section 14.1
	41.80	The period of record used for calculating statistics from operational streamflow gauges should include most recent available data.	Update the section to reflect latest streamflow information.	14.1.4.1	Section 16.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.81	New Environmental Flow Objectives and performance indicators in Fitzroy WRP 2011. Environmental Flow Objectives of seasonal base flow, medium to high flow and first post winter flow are applicable to Node 2 (Beckers GS) and Node 6 (Taroom GS) in the Dawson River. Surface water node locations of Node 5A (Nathan Gorge) and Node 4 (Theodore Weir TW) should also be investigated for impacts to the same objectives.	Update the section to reflect the Fitzroy WRP 2011.	14.1.4.3	Section 14.1.4.2
	41.82	The Callide IROL specifies High priority surface water IWAs, Risk Priority surface water IWAs and Medium Priority groundwater IWAs – this is not reflected in the table with volumes that match. Note there is also a 105 ML IWA in the Dawson Valley Water Supply Scheme.	Update Table to reflect Callide Valley IROL with Medium Priority groundwater IWAs.	14.1.6.2	Appendix A2-B, Section 1.5
	41.83	The Wandoan Coal Mine project was not included in the future demand analysis	Update the information if demands have changed.	14.1.6.3	Section 14.1.5
	41.84	WASOs and PIs have changed under the Fitzroy WRP 2011. The Annual volumetric probability (AVP) is the water allocation security objective for unsupplemented surface water. However, changes to the 30%, 50% and 70% unsupplemented water sharing index must also be reported due to likely changes in water sharing rules. The AVP security objective for the Dawson River water allocation groups are: • Class 10A 68% • Class 10B 68% • Class 10C 66% • Class 11A 63% • Class 11B 60% • Class 12A 63% • Class 13A 60% • Class 13C 67% The term “approved development” is mentioned with regard to a level of development for a scenario. This term is inconsistent with other EIS terminology to describe development levels such as “Full Entitlement” and “With Dam”.	Update to reflect Fitzroy WRP 2011 see Sections 21, 28, 29 and Schedule 7. Indicate how the project will meet Use consistent terminology for scenario descriptions or define other terms clearly.	14.1.6.4	Section 14.1.4.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.85	The proponent has not identified all watercourse crossings for the project appropriately, nor have they provided sufficient detail regarding the crossing methodology for each identified watercourse crossing.	Provide a map series for all watercourse crossings using Queensland Wetland Mapping layers for the entire pipeline route. Refer to the KML maps page of the Wetland Info section of the EHP website. Provide a table that Identifies each crossing point and the following information: - kilometre pipeline point - co-ordinates (decimal degrees, Geocentric Datum of Australia GDA94) - crossing methodology at each (i.e. open trench with flow diversion, coffer dams) - any pertinent crossing-specific sensitivity criteria (proximity to environmentally sensitive areas, EVs, ephemeral pools/refugia etc). - specific measures that will be taken to minimise or mitigate impacts on flora and fauna. - Describe rehabilitation methods to be applied at each crossing.	14.1.7	Section 13.4 and 16.7.1. Appendix B29, Section 9.6
41	41.86	The way this scheme is to be operated is poorly explained and difficult to understand. It was outlined that the primary change was to unite the Upper and Lower sub-schemes but the third dot point suggests otherwise: • 'other existing medium and high priority water products in the DVWSS will be supplied as per their current arrangements' This section requires more detail about system operation especially since two sub-schemes are being combined and new high priority demand being supplied from Nathan has been distributed through the existing system. For example, adjustments to nominal operating levels and or local supply levels. It is unclear if the proposed operating strategy takes account of releases needed to operate the fishway and turtle way. The seasonality of these flow requirements needs to be taken into account.	Provide more detail about system operation. Details of what release requirements were considered including those for operation of the fishway and turtle way should be provided. The EIS should also provide details of how the operational strategy is optimised to achieve the mandatory and non-mandatory requirements of the EFO and WASO while taking into account requirements for the fishway and turtle way.	14.2.2.1	Section 14.1
	41.87	The EIS states: "other existing medium and high priority water products in the DVWSS will be supplied as per their current arrangements". As Nathan Dam will form part of the new DVWSS, this statement or its context needs to be clarified.	Clarify statement or its context.	14.2.2.1	Section 14.1.4.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.88	While the EIS provides information showing the performance of water entitlements pre and post Nathan Dam (measured against WASO's), discussion on the change in characteristics of the supply is not apparent. In particular, the existing water supply is highly dependent on there being regular seasonal inflows and there is no certainty regarding availability of supplies. The presence of Nathan Dam will provide water entitlements with characteristics more like those of the Nogoa Mackenzie Water Supply Scheme.	Provide details on the change in characteristics of the supply for DVWSS entitlement holders.	14.2.2.3	Section 14.1.4
	41.89	The EFO and WASO sections area based on Water Resource (Fitzroy Basin) Plan 1999.	Environmental flow objectives need to be updated to match those specified in Water Resource (Fitzroy Basin) Plan 2011 – Schedule 6. This section of the EIS should be updated to show how the project will meet the current EFOs. WASOs need to be updated to match those specified in Water Resource (Fitzroy Basin) Plan 2011 – Schedule 7	14.2.2.3	Section 14.1.4.2 Section 14.1.4.4
	41.90	Further discussion is required on urban water supply security issues. From an urban water supply perspective, the supplies may not necessarily be considered a high reliability of supply.	Provide more information on town water supply security, and recognition of potential need for higher level of service for urban water supplies, and how this need might be progressed/addressed	14.2.2.7	Section 14.1.4.8
	41.91	Risk assessment tables: Table 14-56 are not explained clearly. Also attributes of tables particularly the "Reduced flow levels and volumes downstream of the dam." seem incorrect.	Further explanation required.	14.3.2	Section 14.5
	41.92	The EIS acknowledges that the project will have the greatest impact on flows immediately downstream of the dam. This includes the Nathan Gorge reaches and other areas (including wetlands) downstream. While commitments are made to 'further optimisation of the flow release strategy' but there is no mention of monitoring that would be needed to determine whether the predicted impacts of the change in the flow regime occur and to inform any changes that could be made to the release strategy to reduce impacts.	Details should be provided of monitoring of impacts due to changes in the flow regime downstream of the dam, and how this information will be used to improve the flow regime in terms of meeting EFOs (non-mandatory) and reduce any adverse impacts identified.	14.6.2.2	Section 14.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.93	The groundwater report does not meet the requirements of the TOR for this project. In particular the department has concerns over the validity of the groundwater model and the assumptions used in formulating the model that will be used to assess impacts. Overall the uncertainties (that are freely admitted) within both the conceptual and numerical groundwater reports need to be reduced by undertaking a dedicated field assessment, and associated drilling program to fill knowledge gaps. It is believed that relevant additional data should also be available from both SunWater Geotechnical investigations and previous State groundwater investigations (GAB Recharge) drilling and monitoring in the mid 1990's. Another major issue is the lack of a defined groundwater monitoring program which must be defined and in place prior to the construction of the proposed dam.	Provide further information that would increase the validity of the groundwater model and provide additional justification of the assumptions used in formulating the model. Reduce uncertainty in groundwater reports by undertaking dedicated field assessments and associated drilling program to fill knowledge gaps. Details of a groundwater monitoring program designed to detect changes due to the project is required.	14	Section 15.2.1
41	41.94	The proponent has not identified all the legislation that applies to the taking of groundwater in the project area. The proponent has omitted reference to the Fitzroy WRP 2011 which manages groundwater in the Plan area. The proponent has also omitted reference to the Sustainable planning Act 2009 (SPA) which states that a development permit will be required for any artesian bores constructed for monitoring and artesian or sub artesian bores constructed for dewatering purposes	Include a reference to the Fitzroy WRP 2011 in this section and include a new sub section (15.1.1.5) that outlines the functions and elements of the Fitzroy WRP 2011 that are relevant to the project. Refer to the SPA and quote relevant sections in regard to development permits for bores.	15.1.1	Section 15.1.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.95	The proponent has listed a main relevant element of the Water Act 2000 as: • a requirement for the holder of a water bore driller to keep drilling records for bores deeper than 6m, and • A system of licensing for water bore drillers that prohibits the construction of bores by unlicensed drillers … The reason for this is not clear as these are very minor elements of the Water Act 2000. The proponent is not required to meet these requirements itself. Therefore, unless they are proposing to obtain a water bore drillers licence to drill water bores for the dam project, these elements are not relevant to the project in terms of the requirements of the proponents. A more suitable reference to the relevant water act elements can be found in sections 10 and 11 of the Water Act 2000.	Remove these two elements from this section (or clarify why they were included) and refer to sections of the Water Act 2000 that are relevant to the taking and interfering with groundwater for this project.	15.1.1.1	Section 15.1.2
	41.96	The last three dot points in this section are not relevant to the proponent as they are not matters relating to drillers that the proponent has to comply with. Refer Issue 15.1.1.1.	Remove the last three dot points in this section.	15.1.1.2	Section 15.1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.97	It would appear that there has been no bore survey carried out in this area except as a desk top study using the groundwater database. The department's database does not contain records of all bores drilled, as prior to 2002 there was no requirement for drillers to provide a drilling log. Therefore, there may be bores in the project area that have not been recorded and could be impacted. There are also statements in the report about susceptibility to pressure increases based on casing type. The casing type of all bores needs to be best confirmed in the field as this data is often not available. The data provided in the appendices, and used for the model, is largely reliant upon licensed bores with volumetric entitlements, stock bores with no volume specified may be left out. There is also some confusion in figures 10 and 11 of Appendix 15E (Model Report) where it is stated: 'Many bores have multiple licenses therefore the number of actual bores is less than the number of licenses.' It is likely that this is the other way around with multiple bores associated with one license (?) There is a clear need for some actual field measurements (water levels, water quality, pump testing for actual aquifer parameters etc).	Undertake a landholder bore inspection to ensure that all bores are captured and up to date details on flows, water levels, casing types, etc. are accurately known.	15.1.3.4	Section 15.2.2
	41.98	The groundwater model is not considered adequate to assess potential impacts - See comments on groundwater model and the data used below. The report states that there is limited data and information on the interactions of groundwater between the Alluvial aquifer and the adjacent or underlying aquifers of the Surat Basin. The groundwater model has included alluvium as a layer, however, it is unclear how the model can assess these interactions if the data is not available (see comments on groundwater model below). It appears that the proponent has not carried out any drilling in the alluvium or pump testing to ascertain groundwater levels in relation to Precipice sandstone and other aquifers, transmissivity, Specific Yield etc. The groundwater model has 5 layers in their model but it is not clear how much data they have in order to set up this model.	Revise the groundwater model with the support of additional field data.	15.1.3.7	Section 15.3.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.99	There are some broad statements made about suitability of water (domestic, stock, irrigation) from the various aquifers based on a mean electrical conductivity (EC) for all samples examined. Given the range of samples involved in some aquifers (which raises concerns about whether we actually have the right aquifer in some cases) this rating of suitability based on a mean is inappropriate.	Document actual water use for each bore and use this data rather than use a mean to describe purpose for water quality, i.e. number of bores used for drinking, number used for stock etc…	15.1.3.9	Section 15.4.2
	41.100	The groundwater model is not acceptable in that it does not have enough data and information to be confident that it can adequately assess the impacts of the dam on the groundwater and should be revised with the support of additional field data. The report states: 'after the model was constructed and calibration commenced however it was quickly realised that there were obvious errors in the observation bore measurements that made them unsuitable for use during calibration'. The report does not list which bores, what were the obvious errors, or is this a case of data does not support model so data must be wrong? Neither the Groundwater report, nor Appendix 15E Model report, provide sufficient detail about the process used to define aquifer parameters. It would appear that parameters for all aquifers were based on some estimated ranges sourced from a basin (Surat) wide generic report or personal comment from one hydrologist. All assumptions made are so heavily qualified that the reports are of limited value.	Revise the groundwater model with the support of additional field data. Assumptions made in the model should be fully explained and where possible, based on quality data.	15.2.2.2	Section 15.3.1
	41.101	It is not clear why the predicted increases in flow from springs upstream and downstream of the dam are so different. For instance, why the increases in flow are much greater in springs downstream from the dam (and apparently further from the inundation area) than those springs that are closer to the water body where presumably the pressure would be higher.	Make it clear from a hydrogeological viewpoint, why the increase if flow is so different in springs upstream and downstream of the dam wall.	15.2.3	Section 15.3.2
	41.101	The report identifies that there may be a risk of bore failure due to increasing pressures, and that a program is required to assess, rehabilitate or replace identified bores. However, it does not outline a specific plan, timelines or a mitigation strategy to undertake this work or who will pay for any work.	Undertake the survey of bores and any necessary works and outline timelines for when this work will be undertaken. The work must be undertaken prior to the commencement of the construction of the dam	15.2.5	Section 15.2.2 and Appendix B29 Section 9.7

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.102	The report does not outline any proposed groundwater monitoring program and further states that a review is needed of any existing groundwater monitoring bores to determine whether these bores are sufficient to capture the data required. It is unclear which bores were used in the development of the model. The report does not describe what inadequacies where observed with that available network when they tried to develop the network. The report also states that there is a need to collect EC and PH only, however, with the possibility of changing pressures in various aquifers an analysis of major ions would be required to try and trace the movement of water from one aquifer to another	Provide a comprehensive groundwater monitoring program that outlines existing and proposed groundwater monitoring points and lists the parameters to be sampled. State triggers for corrective action and proposed actions.	15.2.6	Section 15.5.1, Appendix B29 Section 9.7 and 10.5
	41.103	Inadequate presentation and synthesis of data for assessment against appropriate water quality objectives. Water quality objectives can change depending on the water body type and also depending on flow for specific parameters. The Queensland Water Quality Guidelines (2009) (Appendix D) and the ANZECC and ARMCANZ National Water Quality Guidelines (2000) are quite explicit with respect to the data assessment process (refer Appendix D).	Present the water quality data in a suitable format for assessment purposes in accordance with the Queensland Water Quality Guidelines 2009 (Appendix D). This would mean that physico-chemical parameters should be presented as medians and toxicants such as metals presented as 95th percentiles as a minimum. Identify the waterbody type for each site and subsequently the WQO which applies to that type and EV for each parameter. Indicate whether metals results are dissolved or total measurements in all Tables within the EIS (not just in the appendices) using footnoting and superscripts (as applied in Table 16-9). Associated parameters such as hardness and pH which may influence which trigger value applies or the derivation of an appropriate trigger should be considered or applied correctly. The aluminium trigger value of 55 µg.L-1 applies to pH > 6.5 not < 6.5 as currently indicated in Tables 16-12 and 16-13.	16	Section 16.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.104	Inadequate presentation and synthesis of data for the assessment of temporal and spatial variation, and the influence of extended wet or dry periods	Synthesise the data from all different sources to provide a cohesive picture of spatial and temporal trends in water quality for individual parameters in the areas of interest (above the proposed dam, the dam and surrounds, below the dam) and discuss how these compare. Distinguish weirs/reservoirs, flowing water bodies ephemeral waterholes (or water types specified in Schedule 1of the EPP (Water)), base-flow and high-flow measurements where necessary to facilitate assessment against relevant water quality objectives or guideline trigger values. The QA/QC metadata for each sampling site in this spatial continuum should be clearly apparent (number of samples, date range, data source) rather than having to refer to different Appendices to access this information. Show all parameters measured (not just the parameters detected) in any supporting data tables together with the limits of reporting (if not detected).	16	Section 16.3
	41.105	The Nathan Baseline Study in its current form should only be used to illustrate spatial variation across the dam site within the same time periods. The preference here would be to present this data in conjunction with flow data from these stations and provide some quantitative assessment of these relationships. For example, define the event flow at which these parameters begin to change (increase or decrease) and the magnitude of the change observed (i.e. increase/decrease by a factor of X from Y to Z) in response to flow.	Demonstrate temporal trends using any long term data set sources for individual parameters. For example, the government turbidity and EC data sets would be suitable to illustrate longer term seasonal variation rather than some of the discrete sampling within the Nathan Baseline Study in its current form.	16	Section 16.3
41	41.106	The Dawson River Environmental Values (EV's) and Water Quality Objectives (WQO's) have been included in Schedule 1 of the Environmental Protection (Water) Policy 2011 and include changes to the draft guidelines assessed in the EIS.	Throughout section 16 (and potentially elsewhere in the EIS), update references to include Schedule 1 of the Environmental Protection (Water) Policy 2011 including the finalized Dawson River EVs and WQOs. Remove any superseded information such as the draft Fitzroy Basin Association (FBA) data/publications. Update the guideline values and evaluation of the affected sections of the EIS accordingly.	16.1.1.3	Section 16.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.107	The proponent has indicated that the Dawson River and its tributaries are not listed under Schedule 1 of EPP(Water) 2009 which is not correct (refer Issue 1 above).	Consider relevant EVs, management intent/condition assessments and WQOs under Schedule 1 of the Environmental Protection (Water) Policy 2009, in any assessment. WQOs identified for each of the scheduled EVs should be separately identified and referenced to their source document wherever they are applied throughout this chapter (i.e. in each table).	16.1.1	Section 16.1
	41.108	The suite of parameters identified as applicable to this assessment are not comprehensive enough considering the existence of significant mining and CSG projects within the region and other major land uses. For example, water derived from CSG activities is a potential source of high sodium (compared to other salts), which may have implications for water use in irrigation and ultimately soil integrity. Any increase in agriculture due to the Nathan Dam, may increase the nutrient, pesticide and possibly turbidity loads in this catchment.	Define a broader suite of parameters for condition assessment purposes (than those currently identified in Tables 16-1 and 16-2) which consider likely contaminants from major land uses within the catchment including but not limited to CSG, coal and gold mines and agriculture. Refer to: • Coal Mines - Final Model Water Conditions for Coal Mines in the Fitzroy Basin (Tables 2 and 3) -attached • Gold Mines – including tailings specific contaminants such as cyanide • The influence of CSG associated water (untreated and treated) with guidance from the Draft Coal Seam Gas Model Conditions for parameters of interest -attached. • Pesticide assessments for the Dawson/Fitzroy (loads and/or concentrations).	16	Section 16.6
	41.109	The proponent states that water quality guidelines do not need to be considered for the pipeline since there will be “no significant releases to the environment”. This is contrary to the intent of the EPP (Water) 2009 as the activity is likely to impact on water quality during construction (erosion/runoff, leaks, spill, any discharges) and/or rehabilitation (if not adequately stabilised).	Consider water quality parameters of relevance to the activity at different stages (pipeline construction and ongoing stability/scouring) including dissolved oxygen, turbidity and total suspended solids, pH, relevant total petroleum hydrocarbon ranges as a minimum. Where there are no WQOs defined in Schedule 1 of the EPP(Water) identify those that do apply for specific sections of the pipeline.	16.1.1.5	Section 16.7.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.110	The proponent should not assume that key water quality objectives for parameters applicable to the Wivenhoe Dam will be applicable to the Nathan Dam as these dams differ considerably in their catchment land use, the likely inputs, storage capacity and dilution and risk mitigation strategies required. This should be based on a risk assessment, modelling and monitoring for the water quality in the Nathan Dam in this specific regional context. Indicators identified in Tables to protect environmental values in Schedule 1 of the EPP (Water) 2009 should provide a starting point for this assessment.	Identify the key parameters for the Nathan Dam by including a quantitative risk assessment of the water quality inputs to the dam in this region, under varying scenarios (i.e. seasonality, extended dry periods, storage capacity, and stratification). The derivation of local reference based WQOs for the Nathan Dam itself for eventual inclusion in Schedule 1 of the EPP (Water) can only proceed once the dam is in place and sufficient data has been collected using the reference based approach described in the Queensland Water Quality Guidelines 2009. In the interim, use parameters identified in Schedule 1 of the EPP (Water) for the Dawson River sub-basin for the different EVs identified.	16	Section 16.2 Section 16.5.2 Section 16.8
	41.111	Drinking Water Quality as an environmental value. While there is a "minor" demand anticipated for drinking water to be derived from the Nathan Dam relative to that intended for industrial supply, this EV is of particular significance for the population of this region and potentially in the Surat basin through the pipeline distribution, if the water quality is not going to be fit for supply. Therefore the proponent needs to demonstrate how this water quality is going to be fit for purpose (drinking water supply) to satisfy this demand. A comprehensive condition assessment for this demand is still required even though it will be treated by "the entity purchasing water from SunWater prior to distribution" (Page 16-8). The WQOs to protect drinking water EVs identified in Table 4 of Schedule 1 of the EPP (Water) for the Dawson River apply for water prior to treatment, unless otherwise stated. In particular the proponent should address parameters such as Electrical Conductivity (EC). EC is an issue for coal mine releases and also untreated CSG associated water (which Fairview upstream does currently release). Most importantly EC is not easily treated or removed for drinking water purposes and it is unlikely that the drinking water treatment plants are currently set up to deal with this in all cases. EC is also the parameter likely to increase if the water is held in the dam for lengthy periods of time.	Provide a more comprehensive condition assessment, (referring to the WQOs to protect drinking water EVs identified in Table 4 of Schedule 1 of EPP (Water) for the Dawson River) to demonstrate they can fulfil the anticipated demand for drinking water supply. The proponent should also consider the most recent version of the Australian Drinking Water Guidelines (NHMRC 2011) in the case of "other indicators" and in particular Part V Factsheets as these consider suitability for supply, capacity for treatment to remove and damage to infrastructure considerations (in addition to health- based considerations). See http://www.nhmrc.gov.au/guidelines/publications/eh52	16.1.2.3	Section 16.8

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.112	Data Sources for the Condition Assessment. The data sources appear out of date in many cases and recent data should be used in this assessment where possible. Data which considers a broader range of parameters should be considered in accordance with Issue 4.	Incorporate the most extensive temporal data sets available for a broad range of parameters which may also indicate trends for specific contaminants given the expansion in mining and CSG within the last decade. Incomplete presentation of all parameters measured within Tables 16-12 and 16-13 (derived from reports in Appendix 12 C and 12 B respectively – and the appendices for these reports which contained the laboratory data are not included). For example – TSS, total hardness, pesticides, faecal coliforms, metals (total and dissolved & mercury).	16.1.3	Section 16.3
	41.113	Due to the incomplete assessment of water quality parameters and water quality objectives it is not possible for the proponent to identify all current water quality issues and suitability for existing use. The absence of metals from the list in Section 16.1.4.8 is somewhat surprising given the exceedances of water quality objectives for the limited range of metals measured at numerous sites.	Identify all measured parameters which have exceeded water quality objectives for each environmental value, including metals. Assess and quantify the influence of mining on water quality and the influence of a likely expansion in mining due to the presence of the dam on water quality using existing receiving environment monitoring data and modelled flow scenarios. Industrial use is an environmental value which needs to be assessed as an existing use. Existing industrial users such as coal mines rely on environmental flows for the release of mine-affected water under many current permits. The impacts of this have not been assessed (refer general comments above).	16.1.4.7	Section 16.1 Section 16.2
	41.114	Pipeline crossing water quality. (Refer also Issue 2 and 6 above). The location and relevance of these monitoring sites is currently not adequately presented within Chapter 16. The monitoring strategy eventually developed should be of sufficient quality for assessment against water quality objectives and in order to quantify any departure from baseline water quality. It should include periods prior to construction, during construction, post-rehabilitation and during operation of the pipeline.	Identify these pipeline water quality monitoring sites within Chapter 16 using a map and a table with co-ordinates which indicate their location with respect to each watercourse crossings identified earlier and any environmentally sensitive areas. Prepare a monitoring strategy consistent with the 'Issue' comments.	16.1.5	Section 16.7.1. Appendix B29 Section 9.8.
	41.115	There is no baseline data for total suspended solids (TSS) at the proposed pipeline crossings. This is of particular concern given the potential for increase in TSS concentration during pipeline trenching/construction works in waterways when water is present, especially since most waterway crossings are predominantly silt/clay (reference from 13.1.4.1. Aquatic habitat - Sediment type page 13-34).	Collect baseline TSS data for each waterway crossing in the pipeline component (where possible) to support the surface water quality objectives in the EMP (Section 29.9.8). Include the results in Table 16-16.	16.1.5	Section 16.7

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.116	Dewatering and interference with springs has not been adequately addressed as a process which may impact on surface water quality. The implications of dewatering for surface water quality need to be addressed specifically within Chapter 16. This includes an assessment of relevant water quality parameters and any influence on surface water quality of disturbance to the springs.	Describe the current influence of the springs on dilution of surface waters in this system and the impact of disturbance of these for surface water quality during different project phases (construction and once the dam is in place). Describe the water quality of both the current springs and the water derived from dewatering of the excavation area using a suitable suite of parameters (or summarise in this section if addressed elsewhere). Of particular concern are the proposed practices of disposing of water derived from dewatering and subsequently retained in sedimentation ponds for: • 'watering of otherwise un-impacted natural springs that may show signs of drying due to dewatering'; and • 'progressive release back into the river under a water quality management plan'	16.2.1.1	Section 16.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.117	Consideration of time-to-fill scenarios and normal operating conditions on water quality, and existing environmental authorities. This assessment is currently inadequate for all parameters and does not consider the worst-case scenario. The effects on EC in the water storage are not specifically considered for example within this period. It is likely that if environmental flow triggers for the dam are not achieved for extended periods of time that a decline in water quality in the water storage is possible. An additional consideration is the potential for effects on existing downstream mining operations for example, which are conditioned to release in response to base flows in accordance with the Final Model Water Conditions for Coal Mines in the Fitzroy. These conditions were derived in the absence of the Nathan Dam and the implications of the altered flow regime on water quality for these discharges need to be more completely assessed.	Assess the influence of this temporal variation in dam water volume on all water quality parameters identified as an issue, including electrical conductivity. Base this assessment on quantitative modelling if possible. Any modelling of the time to fill and under normal operating conditions scenario, in the water storage and downstream, should consider extended dry periods. Consider other scenarios as well as the 50 % probability (i.e. some worst-case) particularly for the environmental release triggers (base-flow and first winter flows separately) and overflow/spill triggers (will take 1 and 3 years respectively under the 50 % scenario) and consider the effects on water quality within the dam and downstream. Consider the influence of this time to fill period on the flattening of the hydrograph downstream. This would impact downstream mining operations which are conditioned to release during times of flow (specific low, medium and high flow triggers) under existing environmental authorities in accordance with the Final Model Conditions for Coal Mines in the Fitzroy. These flow triggers have been derived based on the assimilative capacity of the upstream catchment (catchment area/dilution) and/or demonstrated relationships between flow and changes in electrical conductivity. If the windows for release are impeded or non-existent, a decline in water quality in the mine-affected water storages is highly likely. This decline could represent a problem for the environment in the event of either delayed releases or where transitional environmental programs are required in addition to current environmental authority conditions derived in the absence of the Nathan Dam. Some consultation with these stakeholders with respect to the management of these effects during this period is required if environmental flow triggers are not likely to be met during either the time to fill or under normal operation. Consider how the altered flow regime modelled in Chapter 14 might impact on water quality downstream if dilution of current discharges is impacted through a reduction in flow.	16.2.1	Section 16.5 Section 16.5.1 Section 16.5.2 Section 16.6
	41.118	Management of flows and possible increased sediment loads associated with watercourse crossings during pipeline construction have not been adequately considered.	For all major watercourse crossings of the pipeline, describe how flows with be managed (diversion, ponding, etc) and the effects on aquatic fauna and erosion (scouring).	16.2.2.1	Section 16.7.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.119	The management of cleared vegetation stockpiles particularly in relation to watercourses and rehabilitation of riparian areas is inadequately described.	Describe how and where cleared vegetation will be situated with respect to the aquatic ecosystems (distance from bank etc.) and disposed of. Describe in more detail how riparian areas will be successfully rehabilitated in this environment.	16.2.2.1	Section 16.7.4. Appendix B29 Section 9.4, 9.6 and 9.9.
	41.120	The management of trench spoil as a waste needs to be considered since it is unlikely that 100 % reuse/reinstatement is possible. It is unlikely that all spoil generated can be reinstated since some fill for the trench is being sourced externally and the pipeline itself will consume space in the void. This spoil could present a risk to aquatic ecosystems if it erodes in subsequent wet seasons if is not adequately managed/disposed of.	Provide details on how trench spoil will be managed.	16.2.2.1	Section 6.2 and 6.2.2. Appendix B6 and Appendix B29.
	41.121	The proponent has not adequately identified existing activities where discharge is permitted under Environmental Authorities which were derived in the absence of the Nathan Dam both upstream and downstream in the Dawson River which might be impacted by the time to fill and alteration to flow scenarios. In addition, the proponent has not considered how the presence of the Nathan Dam might influence either an expansion in mining (and hence mine-affected water discharges) or other land use activities relevant to water quality. The proponent has not indicated how the presence of the Nathan Dam (as an environmental value to protect) might impact on any expansion in mining above the dam (capacity to discharge mine affected water) in the future. Figure 28.5 (as currently referenced) is grossly inadequate to 'highlight the likely extent of cumulative impacts associated with flow and water quality'.	Consider any impacts for water quality of impacts on existing permitted activities. This would require that these existing activities be specifically identified which is not currently the case. Quantify the influence on specific water quality issues (parameters) using modelling which integrates both flow effects and surface water quality, allowed discharge, particularly for parameters which are identified as a current or likely future issue for water quality. Specific statements regarding the cumulative impact on these parameters are required. Address how any expansion in land use activities as a result of the Nathan Dam might impact on water quality. Identify proposed and existing activities upstream of the Nathan Dam such as Lillyvale (Figure 1-6), Wandoan, Fairview (CSG), Spring Gully (CSG) and discuss how these might impact on the future environmental value and water quality of the Nathan Dam and their capacity to supply water for different uses. Clarify how Figure 28-5 'highlights the extent of cumulative impacts' for water quality as it is not apparent and does not extend downstream.	16.3 Table 27-7	Section 16.6
41	41.122	The final paragraph in this section refers to scouring and pigging of the pipeline, however little detail is provided. These practices could present a risk and they have not been adequately described previously.	Describe the likely volume of release, sources of water and likely water quality of releases from these procedures. Address the risks to aquatic ecosystems (materials safety data sheets) from any additives that are added to this water that will be discharged.	16.2.2.2	Section 16.7.3

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.123	Dust deposition impact is illustrated using Figure 17-8. However, the unit of deposited dust concentration is not provided in this figure. It is also not clear what will be the cumulative impacts of the project by incorporating the background dust deposition values.	Clarify what is the dust deposition unit in Figure 17-8 and the cumulative impacts of the project by incorporating the background dust deposition values	17.2.1.2	Section 17.1
	41.124	The EIS reports that the clay borrowing activities, if carried out at the proposed site, may have some impact due to dust levels above the standard at a sensitive receptor which is less than 600 m from the site. Proposed mitigation measures are to use another clay source, but none are identified.	Provide details of the location and impacts of alternative sites to clay borrow area 8 to ensure the project has a viable source of clay for constructing the dam.	17.2.3.1	Section 17.2
	41.125	The introduction (second bullet point) states that a goal is to: 'Develop construction and operational noise goals for the project using relevant legislation and guidelines." Various legislation and non-legislative material is described in the chapter.	Include the following guidelines and standards as source material in relevant parts of the chapter. • AS1055.1 and AS1055.2, 1997. "Description and Measurement of Environment Noise, Recognised Sleep Disturbance Criteria", British Standards BS7385, part 2, 1993 • "Evaluation and Measurement for Vibration in Buildings, Guide to Damage Levels from Ground-borne Vibration", BS6472, 1992 - Evaluation of Human Exposure to Vibration in Buildings (1Hz to 80 Hz) • Australian/New Zealand Standard AS/NZS 2107-2000, Acoustics – "Recommended Design Sound Levels and Reverberation Times for Building Interiors" • "World Health Organisation Night noise guidelines for Europe", 2009	19	Section 19.2
	41.126	The EIS should identify the receptors such as schools, hospitals, nursing homes, childcare facilities and other similar public facilities in the project area.	Identify within the project areas those receptors identified as public facilities and check that the received levels are below 45dB LAeq Day time 40dB LAeq Evening time 35dB LAeq Night time Propose mitigation methods and enhance noise management that would be applied if required.	19	Section 19.3
	41.127	In Section 19.1.3.3 it is mention that that no source of vibration is likely to influence ambient vibration levels at sensitive receptors.	Demonstrate that the propagation of the shock wave from blasting is at a distance such that the shock wave is absorbed by the soil before reaching the sensitive receptor. State the distance and what soil type and charge was used for the calculation.	19.1.3.3	Section 19.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.128	This section identifies an acoustic quality objective of 50 dB(A) LAeq, 1hr for construction noise of the pipeline. However, noise contour monitoring contained within the EIS shows that the 50 dB(A) target would be exceeded should operations be located within 870m of any noise sensitive receptors (NSRs). Having established the real potential for noise nuisance impacts and noise related complaints during the construction phase of the pipeline the EIS needs to address specific steps and measures to mitigate the likelihood of noise nuisance impacts.	Outline strategies, including negotiating acceptable outcomes with noise sensitive receptors located within the identified 870m buffer where the acoustic quality objectives cannot be met, as well as avoidance, timing of construction activities and other measures that could be taken to ensure acoustic quality objectives can be met at sensitive locations.	19.1.6	Section 19.5
	41.129	If a 500 kg charge is unlikely to be used it is unclear why Figure 19.4 includes charges up to 14,000kg.	Cap the charge up to 500 kg for the graphical representation and give an explanation of the constant Ka in relation to soil type, e.g. soft rock, hard rock, clay etc.	19.4	Section 19.6
	41.130	The sound pressure level for the pump and generator is very high and results in the target level of noise would be exceeded for up to 6 km from the source.	Outline noise treatment methods for pumping stations to lower the source noise level emission. Propose the level of sound attenuation provided by the mitigation treatment. Evaluate the noise level emission with the mitigation treatment proposed. For the indicative pipeline route, identify feasible sites where pump stations may be located that would result in the target noise level being achieved at any noise sensitive receptors potentially affected by the noise from the pump station.	19.2.5	Section 19.7

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.131	The statement that animals becomes desensitised to noise is misleading. It is well understood that humans living next to constant noise are subject to higher stress but may have no choice to move to a quieter area. The same may be true for an animal. Animals may avoid areas of disturbance and therefore construction activities may be a temporary impact. For permanent structures relying on avoidance is not appropriate and noise impacts should be mitigated. Professor Brown in the noise effect on Wildlife conference in 2000 stated that "Habituation to noise could enable animals to increase tolerance but, as with humans, anecdotal evidence of habituation is inadequate, and will need to be tested by appropriate studies. The influence of habituation, and overall tolerance to acoustic disturbance, are areas that require further investigation. There is still an absence of understanding how observed behavioural and physiological effects translate into ecological consequences for wildlife." Barber et al. 2009 states that that animal listening area and alerting distance are reduced substantially by moderate human noise.	Update the EIS information in relation to noise impacts on wildlife and propose mitigation measures where appropriate. The following references are relevant to this section: L. Bejder, "Impact assessment research: use and misuse of habituation, sensitisation and tolerance in describing wildlife responses to anthropogenic stimuli" Marine Ecology Progress Series, Vol. 395: 177–185, 2009. L. Brown "noise effect on Wildlife conference 2000". Institute for Environmental Monitoring and Research. ISSN: 1481-0336. J. Barber, K. Crooks, K. Fristrup. "The costs of chronic noise exposure for terrestrial organisms" Trends in Ecology and Evolution, Vol.25 No.3, 2009. J. Barber, C. Burdett, S. Reed, K. Warner, C. Formichella, K. Crooks, D. Theobald, K. Fristrup., "Anthropogenic noise exposure in protected natural areas: Estimating the scale of ecological consequences". Landscape Ecol, 2011	19.2.8	Section 19.1
	41.132	In addition to areas along the pipeline route where notifiable activities have been identified in the EIS, significant areas of sodic soils are very likely to be encountered. The EIS does not include an estimate of the volumes of unsuitable subsoils that may be sodic and which may impact on surface soils if disposed of incorrectly. Sodic subsoils should not be left on the surface after the pipeline trench has been filled in due to the risk of causing surface sealing that can result in loss of vegetal cover, and increased runoff rates and erosion. Where excavation activities may result in an excess of sodic subsoil, there is a need to define suitable disposal measures that will prevent land degradation.	Provide detailed soil survey information to clarify volumes of hazardous soil that may be excavated and be surplus to pipeline construction activities. Suitable mitigation measures for disposal of any surplus subsoil wastes are to be defined including stabilisation, revegetation, aftercare and monitoring. Removal of sodic material for gully filling should be restricted to sites that are identified as sodic. Any sodic material must be covered with good quality soil in order to encourage revegetation. The pipeline trench should be top dressed with non sodic soil to minimise the potential for dispersion and subsequent erosion whilst at the same time enhancing the possibility for good revegetation. Where excess spoil is formed into mounds, those mounds need to be established in areas where they do impact on surface runoff or overland flows. The mounds must be covered with good topsoil and revegetated. In addition these sites would need to be monitored at regular intervals.	20.3.1.5	Section 20.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.133	Where excess spoil is spread across the right of way, it should be incorporated into the surface of the exposed subsoil on which it is laid, and receive sufficient ameliorant so it has similar chemical characteristics to the exposed subsoil. Amelioration should involve the addition of lime for acidity and low Ca, Mg and gypsum for sodicity. This will be required to achieve the stated goal of returning the disturbed land to its original condition and productivity. Compaction of the exposed subsoil, the spread spoil and spread topsoil should be avoided.	Outline in detail the procedures for identifying the characteristics of excess spoil material and the method for disposing of such material while returning the disturbed land to it original condition and productivity. Based on laboratory data recorded in the soil investigation, detail the rates of ameliorants likely to be required to improve the spread layer of spoil to an acceptable quality similar to the underlying exposed subsoil.	20.3.1.5	Section 20.4
	41.134	This section states that no landfills will be located at construction sites but instead waste will be removed off-site by licensed contractors for disposal. Given the significant volumes of waste likely to be produced during the construction phase of the pipeline the EIS needs to address the fate of all wastes, particularly given potential impacts to small regional waste disposal facilities.	Address the issue of waste disposal with definitive solutions, together with the environmental commitments. Where relevant address impacts to small council operated waste disposal facilities i.e. their ability to effectively dispose of large quantities of waste arising from the construction phase and where appropriate detail mitigation measures or alternatives.	20.3.2.1	Section 20.1 Section 20.3
	41.135	Project proposes to possibly re-locate the Queensland Heritage Place (# 601774) 'The Glebe Homestead'. A detailed report on this proposal should be provided to the Queensland Heritage Council (QHC) to enable the QHC to make a recommendation on the proposal. The proponent will require development approval for interfering with a Queensland Heritage Place.	Provide a report to the Queensland Heritage Council in accordance with section 71 of the Queensland Heritage Act 1992, and the subsequent recommendation of the QHC is incorporated fully into the EMP for the project prior to finalisation of the EIS. Sufficient details of the proposed management of 'The Glebe Homestead' should be provided to enable EHP to determine if a development approval could be issued and if so, what conditions would need to be attached to that approval.	23.2.2	Section 23.1
	41.136	The project proposes to use NSW archival recording guidelines. QLD guidelines are available and should be used.	Any archival recording should accord with the Queensland Government "Guideline: archival recording of heritage registered places" available at:: http://www.derm.qld.gov.au/heritage/documents/gl_archival_recording.pdf	23.2.1	Appendix A2-B, Section 1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.137	The EIS states that a consultant is to be engaged to assess site impacts and develop a site specific management plan to manage the impacts to the Queensland Heritage Place (#602769), Taroom Aboriginal Settlement (former). The department has not received any advice of the assessment results or proposed management plan.	Provide the proposed management plan to the Manager (Cultural Heritage) Central Region, Department of Environment and Heritage Protection (DEHP) for review and endorsement prior to being included in the EMP. Also, develop the archaeological management plan in accord with the department's draft "Guide to preparing Archaeological Management Plans in Queensland". Archaeological investigations should be informed by the department's draft "Guideline: Archaeological Investigations".	23	Section 23.1
	41.138	Description of likelihood ratings in Table 26-3 incorporates use of the term 'risk'. However risk is defined by consequence and likelihood. The use of risk in this table is misleading.	Delete word "risk" from description and replace with 'hazard', 'event' or 'hazardous event'.	26.1.3.	Section 26.2
	41.139	The section refers to modelling under the WRP 1999 environmental flow objectives which are out of date. The section also states that: "The model results show that WRP environmental flow objectives are met under the Cumulative Impacts scenario in most cases. Where they are not met initially, operational strategies will be revised to ensure that they are met (at least in the case of mandatory flow objectives)." Monitoring that would be required to determine if WRP objectives are met under the Cumulative Impacts scenario are not described.	Operational strategies (including monitoring programs) need to be addressed as compliance may affect the yield from the dam and ultimately, project viability.	27.3.3.1	Section 14.1 Section 27.5
	41.140	The last paragraph in the section states: "Construction of the proposed water infrastructure will also result in a greater number of physical barriers to aquatic fauna movement and migration in the Fitzroy Basin. In each case, fauna passages will be developed to facilitate movement past the dam or weir." Insufficient detail is provided on the proposed fauna passages to determine if they would be effective.	Provide locations and detailed design of fauna passages as this may affect costs and therefore viability (Fig 2.19 is not detailed). Designs are needed for certainty of the effectiveness of mitigation measures which the EIS does not provide in its current form.	27.3.3.1	Section 27.3.1

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.141	The EIS lacks detail about the construction of the 600 mega litre balancing storage and associated considerations. It would seem that the balancing storage is located on the top of the range between Wandoan and Miles. While the potential to take overland flow is unlikely, it would be appropriate for the EIS to actually state that the construction of the balancing storage must exclude any take of overland flow given the provisions for regulating overland flow water in the Condamine Balonne catchment.	The EIS text should clarify that the proposed balancing storage will not involve any take of overland flow.	28.2.5.4	Part C
	41.142	The proponent presents an argument that springs in the development area are not included in the definition of those that support the EPBC Act threatened ecological community 'The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin' (GAB spring community). The terms of reference for the assessment of sensitive environmental areas (section 3.3.1), including communities listed as threatened under the EPBC Act state that: The EIS should identify areas that are environmentally sensitive in proximity to the project or which may potentially be impacted by the project. The proximity of the project to any environmentally sensitive areas should be shown on a map of suitable scale.	Provide up-to-date information at the scale of the development to support the position that the springs occurring in the impoundment area do not fit the definition of the threatened ecological community. Remove the sections that misrepresent the SPRAT profile and recovery plan information, or quote these documents more completely to put sentences in context. Reconcile the conflicting information in this section and the relevant sections of Chapter 15 Groundwater. Either make this section consistent with the hydro-geological assessment in chapter 15 and its associated appendix or amend the groundwater data to fit with the argument in section 28.3.4.2. If this cannot be done, the section should be deleted and the EIS should include the spring communities as an EPBC Act listed threatened ecological community and deal with it the same way as other threatened communities. Correct the reference to Figure 28-8 which should read Figure 28-9. Also Figure 28-9 should be inserted at about page 28-48.	28.3.4.2	Section 28.1.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.143	The 28 springs within two spring complexes (Boggomoss and Dawson River) are within the definition of the threatened ecological community as listed by the EPBC Act and therefore their values impacts and offset requirements need to be addressed.	The values, impacts and offset requirements of these springs need to be address with reference to: 1. "Recovery Plan for the community of native species dependent on natural discharge of groundwater from the great Artesian Basin". (2010) Report to Department of the Environment, Water, Heritage and the Arts, Canberra. Queensland Department of Environment and Resource Management, Brisbane; 2. "Ecological and Botanical survey of springs in the Surat Cumulative Management Area". Report to the Queensland Water Commission by R.J. Fensham, C, Pennay and J.Drimer (2012) Queensland Government.	28.4.2	Section 28.1.4
	41.144	Compensation (offset) associated with the loss of Great Artesian Basin (GAB) spring wetlands via the State offset policy may also provide future habitat for the snail.	GAB spring wetlands outside the inundation area of the water storage should be permanently protected and efforts made to enhance and minimise impacts on the condition of these remaining wetlands. Suggested is a pro-active approach to buy back the water entitlement over a spring (in order to remove this as a water extraction threat) in the vicinity of the GAB wetlands that has EPBC listed species associated with it.	28.4.2	Section 28.1.4
	41.145	At the start of this section the proponent states that a formal assessment using the Significant Impact Guidelines is not undertaken because the springs in the development area are not included in the threatened ecological community definition. In this section the proponent uses information from Chapter 15 Groundwater to highlight potential positive outcomes from dam construction. Modelling suggests the dam will increase groundwater pressure and cause a likely increase in the size of existing wetlands and the creation of new wetlands outside the FSL. However, all the information in the groundwater assessment supports the inclusion of the springs in the definition of the threatened community. If this section is going to argue positive outcomes of the dam on the environment by using hydro-geological information, it cannot reasonably start the section with a claim about spring listing that ignores the very same hydro-geological information.	Reconcile the use of EIS groundwater information to promote positive outcomes of the dam while not using EIS groundwater information that supports the definition of GAB springs in the FSL as EPBC Act listed threatened communities.	28.4.2.2	Section 28.1.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.146	The EMP is not adequate to meet the requirements of the TOR for this project. It is focused on construction activities and for groundwater, dewatering during construction. The EMP lacks specificity of the location of monitoring sites, parameters and baseline levels against which the need for corrective action will be assessed. The EMP should address the need to monitor the ongoing effects of operation of the dam. A major issue is the lack of a defined groundwater monitoring program and specific timelines for monitoring and assessment reports which must be defined and in place prior to the construction of the proposed dam.	Provide a revised EMP which addresses construction and operational issues and includes comprehensive monitoring programs that would detect impacts and inform management of mitigation measures. The programs should also be useful in modifying existing project management and procedures to improve environmental outcomes.	29	Section 29.4 and Appendix B29 sections 9.7 (construction) and 10.5 (operations).
	41.147	Construction of diversion banks/drains (whoa boys) in sodic soil areas can lead to exposure of sodic subsoil which may lead to increased erosion risks.	Include the following mitigation measures: - Appropriate construction methods of banks should be used to control runoff in sodic soils areas; and - Alternative construction methods may be required to avoid exposing the sodic subsoil.	29.9.4	Section 6.2.1 Section 29.3
	41.148	The proponent has committed to establishing a groundwater monitoring program prior to dam construction, however, has stated that monitoring should be undertaken but has not committed to an exact commencement timeline, only stating that it will be on a monthly basis for six to twelve 12 months prior to commencement of construction. This creates uncertainty and six months is to not a sufficient timeline to establish background groundwater conditions. There is no commitment regarding on-going monitoring of the post construction dam impacts on both groundwater systems and associated Groundwater Dependant Ecosystems.	Establish a groundwater monitoring program and commence monitoring for at least 12 months prior to construction to establish background groundwater conditions and includes measurement, assessment and monitoring of post construction dam impacts.	29.9.7	Section 29.4. Appendix B-29 Section 10.5.
	41.149	The proponent proposes that if GAB spring water supply is impacted by dewatering activity, irrigation of the springs with water extracted from dewatering operations around the dam construction area will be undertaken. Given the potential for high electrical conductivity (EC) groundwater in the dam construction area (Table 15 - 4 Summary statistics for groundwater electrical conductivity (µS/cm)), such water may be unsuitable for irrigation at the Boggomoss springs.	The EMP should propose to evaluate the suitability of the water quality intended for irrigating at the Boggomoss springs. If the water is unsuitable for such irrigation purposes, propose methods to improve water quality to a suitable standard before irrigation, or propose alternative water sources that are suitable for irrigation.	29.9.7	Section 16.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.150	The proponent has committed to provide reports the details of groundwater monitoring "if requested" by the relevant authority. This is no longer accepted practice. The plan also does not commit for any assessment of impacts or mitigation measures for those landholders whose water supply may be adversely impacted by the construction of the dam. Further, no review is proposed of the existing groundwater model which the proponent has recognised as having significant shortcomings. Finally the proponent has not included any proposed terms for the EA and until these terms are provided then it is not possible to offer further comments on the EMP.	Commit to provide groundwater monitoring information on a quarterly basis within 30 business days of being collected. Provide an assessment of the impacts of the dam on groundwater on an annual basis and provide an update of the groundwater model at the end of the first, third, fifth and 7th year of dam operation and thereafter every three years.	29.9.7	Section 29.4 Appendix B29, Section 9.7
	41.151	Performance criteria text needs updating to refer to appropriate policy and guidelines.	Amend Performance criteria text to the following: "Compliance with water quality objectives for the projects as outlined in a Project Water Quality Monitoring Program (PWQMP). The water quality objectives in the PWQMP should be informed by background water quality conditions recorded upstream of the project activities or in receiving waters determined in accordance with the Queensland Water Quality Guidelines (2009) and as described in Schedule 1 of the Environmental Protection Policy (Water) 2009."	29.9.8	Section 29.5 Appendix B29, Section 9.8
	41.152	The Monitoring section needs more information. Include total petroleum hydrocarbons due to heavy machinery use and total suspended solids (as a minimum set of parameters) in addition to turbidity to monitor effectiveness of sediment and erosion control measures.	Include total suspended solids and total petroleum hydrocarbons in the minimum list of parameters which should be measured.	29.9.8	Section 29.5
	41.153	The proponent should ensure any vegetation clearing undertaken is approved for clearing, and is also cleared in accordance with any conditions which may be stipulated in the vegetation clearing permit.	Insert the following under the 'Performance Criteria' section in the table: 'Vegetation approved for clearing is cleared in accordance with any condition that is stipulated in the vegetation clearing permit.'	29.9.9	Section 29.6 and Appendix B-29 Section 9.9.
	41.154	Many of the mitigation measures mentioned in this section will also be the responsibility of the Applicant, as well as the contractor.	Insert the following under the 'Responsibility' section in the table: 'Contractor and Applicant'	29.9.9	Section 29.6

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	41.155	Revegetation/rehabilitation plan - there is insufficient detail in the EMP in relation to the methods that will be used for rehabilitation and revegetation of the pipeline easement. This section needs to include significantly more detail on numerous aspects of the rehabilitation of the pipeline easement impact area, including plant species for screening and landscaping, reference site for monitoring rehabilitation, possible topsoil storage and replacement and erosion and sediment control along this impact easement. With regard to the management of topsoil, the following should be included: • more detail in relation to top soil storage and maintenance should be included in the EIS and EMP; and • details of topsoil management should include transport, storage and return of topsoil to disturbed areas; and • topsoil should be stored for a minimum time period. Minimisation of topsoil storage is important to maintain viability of the seed bank. The minimisation of topsoil storage times (to retain the viability of the seed bank and reduce fertility degradation) should also be addressed.	Include a final revegetation and rehabilitation plan that includes the information listed in 'Issues".	29.9.10	Section 6.5 Section 29.6 Appendix B29, Section 9.9
	41.156	Under s237 of the Water Act 2000 a water permit will be required for taking water to be used for an activity with a reasonably foreseeable conclusion date. The application must be made in the approved form, supported by sufficient information to enable a decision on the application and be accompanied by the fee prescribed under the regulation. It should be noted a "construction authority" is allowed to take water without a water permit if they abide by the "Protocol for Construction Authority – Authorised taking of water without a water entitlement under the Water Regulation 2002". The protocol can be found from the Department website: (search for Protocol for constructing authorities)	Update Approvals section of the EIS to include reference to the "Protocol for Construction Authority".	Appendix 1D – Approvals	Section 1.5.2
42	42.1	Camps should not be near towns.	Move the camp away - at least 20 km from town.	24.5.5.1	Section 2.3.1 Section 24.7

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
43	43.1	Poor data and dated studies (2007) have been utilised to underpin the extent and scale of predicted environmental impacts contained in the EIS. The EIS does not comply with the ToR.	Re-conduct all fauna and flora field surveys to ensure information utilised to predict environmental impacts is based on current scientific knowledge, complete data sets and takes into account prevailing ecological conditions.	12 13	Sections 11.7 and 11.1. Appendix B1-B under Protected Wildlife Habitat
	43.2	Concern about the lack of similarity between the data collected by SunWater and the findings of Dr John Stansic's past and recent surveys.	CG to examine this issue to ensure that the critically endangered boggomoss snail is not put at further risk.	11.1.3.5	Section 28.1.2
	43.3	Concern that no prior trials will be conducted to determine whether the snails can be successfully relocated.	The proponent to in collaboration with Dr John Stanisic: ▪ conduct appropriate field surveys to prove their claim ▪ conduct appropriate trials of snails from the Mt Rose boggomoss. The proponent to comply with the objectives and actions of the Queensland and Australian Government endorsed Boggomoss Recovery Plan.	11.1.3.5, 28.3.4.2	Section 28.1.2
	43.4	EIS does not comply with the ToR. It does not provide adequate information about the assessment of risks and mitigation measures to address all adverse environmental impacts.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	ES	Appendix A2-B section 1.3
	43.5	The environmental offsets strategy contained in the EIS does not comply with the Queensland Government's Environmental Offsets Policy 2008 (QGEOP).	The Coordinator-General should reject the project and direct the proponent to prepare a new strategy that fully complies with the objectives and principles of the QGEOP.	10.4	Section 10.2.4 and Appendix B1-B
	43.6	The assumption that impacts to biodiversity can be effectively offset by replanting areas above the FSL of the dam is flawed.	The Coordinator-General should require the proponent to comply with the Queensland Government's Biodiversity Offsets Policy to ensure that adverse impacts to state significant fauna and ecological communities is firstly avoided and that all residual impacts are effectively mitigated.	10.4	Section 10.2.4 and Appendix B1-B
	43.7	Design of fishway passage device.	Proponent to provide detailed information about the design and management of the fishway device it intends to use. Design must be independently peer reviewed and open for public comments and feedback.	2.3.1.7, 2.3.1.8, 13.2.1.2	Section 2.1.2, Section 13.4
	43.8	Design of fishway passage device	Proponent to provide an assessment of the risk to all fish species from the design and operation of the selected transfer device.	2.3.1.7, 2.3.1.8, 13.2.1.2	Section 2.1.2, Section 13.4
	43.9	The EIS does not contain sufficient information about the turtleway design.	The proponent to install suitable passage devices on downstream water storage infrastructure to ensure that a net environmental benefit is achieved for aquatic fauna throughout the Dawson River.	2.3.1.7, 2.3.1.8, 13.2.1.2	Section 13.4 and 13.5

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	43.10	Proponent has failed to fully address the range of cumulative impacts that may occur. Has not complied with the ToR.	Address and demonstrate how all cumulative impacts that potentially occur as a result of all phases of the project will be avoided, minimised and mitigated.	27	Chapter 27
	43.11	Proponent has failed to address consequential impacts from the use of water supplied from the project.	Consider any consequential impacts that occur from coal mines and associated activities that utilise water supplied from the proposed dam.	1.4.4	Section 1.2
	43.12	Proponent is responsible for the range of consequential adverse impacts that are likely to be facilitated by the project should it proceed.	The Coordinator-General must require the proponent to address: ▪ adverse impacts to the Great Barrier Reef World Heritage Area and other MNES caused by increased greenhouse gas emissions that will result from new coal mining developments that are facilitated by the project. ▪ adverse impacts to the Great Barrier Reef World Heritage Area and other MNES caused by releasing contaminated wastewater to the environment from new coal mining projects that are facilitated by the project. ▪ adverse impacts to the Great Barrier Reef World Heritage Area and other MNES that will be caused by the disturbance and disruption to surface waters, overland flows and groundwater systems from new coal mining developments that are facilitated by the project.	1.4.4	Section 1.2
	43.13	Proponent has not provided an estimate of the total volume of greenhouse gas emissions that will result over the full lifetime of the project or how it will be avoided, minimised and mitigated.	The Coordinator-General should require the proponent to: ▪ calculate the total greenhouse gas emissions that will occur over the full life term of the project ▪ assess the effectiveness of (preferred and alternative) measures to mitigate greenhouse gas emissions that occur over the full term of the project. ▪ develop and implement measures to enable the project to achieve greenhouse gas emission neutral status within 3 years of the project's commissioning.	18.3	Section 18.1 and 18.2
	43.14	The EIS does not provide an analysis of how the project conforms to the core objectives and principles of the *National Strategy for Ecologically Sustainable Development (ESD) 1992* as required under the ToR.	The Coordinator-General to require the proponent to provide a comparative analysis of how the project conforms to all of the core objectives and principles of the *Ecologically Sustainable Development 1992* strategy as required under section 5.2 of the ToR.	25.5	Section 25.5
	43.15	Chapter 22 of EIS gives a strong impression that impacts to indigenous cultural values affected by the project can be satisfactorily addressed through the Cultural Heritage Management Plans.	The Coordinator-General should engage and consult directly with relevant Traditional Owners to ascertain whether the statements made by the proponent in Chapter 22 of the EIS are supported and endorsed by the region's Traditional Owners.	22	Chapter 22

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	43.16	Proponent has not adequately addressed the broad range of short and long-term adverse environmental and other impacts that will occur.	The Coordinator-General to direct the proponent to address all impacts.	N/A	Appendix A2-B Section 1.3
44	44.1	There is little or no investigation of the potential for the proposal to activate or facilitate the intensification of existing irrigation areas.	Consider the potential for the provision of water and expansion of present levels of activity to lead to increased sediment loads. Develop actions to ensure this is not the outcome formulated.	14.2	EIS 1.4.4.1
	44.2	The EIS states water derived from the Nathan Dam and Pipelines project will be used in SunWater's existing reticulation network in irrigation areas. This suggests Nathan Dam water will be used to activate or intensify existing agricultural activities in these areas.	Statements with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	N/A	Appendix A2-B Section 1.4
	44.3	Concern that the conclusion that there will be little or no impact on the Great Barrier Reef Marine Park is based on the assumption that there will be nil use of water by agriculture.	Should there be an allocation of Nathan Dam water to existing or future irrigated agricultural areas, ensure that there is consideration to the consequential increase in loads of nutrients, sediment and potentially pesticides associated with the use of the water in this way.	N/A	Appendix A2-B Section 1.3
45	45.1	The methodology used in EIS to estimate population is not sufficient.	Further clarification and justification of methodology applied to sampling for Boggomoss Snail.	11.1.3.5, 28.3.4.2	Section 28.1.2
	45.2	There is a focus on the total number of known sites containing Boggomoss Snail rather than assessing impacts on the total number of animals impacted.	The EIS should assess potential impacts on each known site specifically rather than through a general summary.	11.1.3.5, 28.3.4.2	Section 28.1.2
	45.3	Translocation is not considered a mitigation measure and should be considered as an option of last resort after all mitigation measures have been fully considered.	Identify the risks of translocation.	11.1.3.5, 28.3.4.2	Section 28.1.2
	45.4	The request from SEWPaC to identify appropriate mitigation and offset measures (translocation) for any affected populations of Boggomoss Snail have not been adequately addressed.	Further information provided to address these impacts.	11.1.3.5, 28.3.4.2	Section 28.1.2
	45.5	There is no consideration of the impacts of major flooding in recent years on the Boggomoss Snail and whether a detailed literature review of any recent or localised studies has been undertaken.	Consider the impacts of major flooding to address the full extent of impacts on the Boggomoss Snail.	11.1.3.5, 28.3.4.2	Section 28.1.2
	45.6	Need to assess potential and likely impacts on riparian and floodplain habitat downstream of Nathan Dam.	Further information provided to address these impacts.	11.1.3.5, 28.3.4.2	Section 28.1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	45.7	Concern regarding the methodology for describing community of native species dependent on natural discharge of groundwater from GAB. There is no primary data resulting from hydrological observation to support claim.	Further information provided to address these impacts.	11.1.3.5, 28.3.4.2	Section 28.1.4
	45.8	Concern that the Springsure Supergroup be excluded from the GAB NRP.	Proponent needs to support this claim with detailed hydrological studies of the spring and aquifer source waters to prove such an interconnection does exist.	11.1.3.5, 28.3.4.2	Section 28.1.4
	45.9	Concern regarding the dispute in regards to the finding that the Springsure Supergroup contains "exceptional values" of spring complexes including Boggomoss on basis Boggomoss Snail is not present.	Supply evidence derived from a statistically representative field survey to support the assumption that the Boggomoss Snail is not present at boggomoss spring complexes.	11.1.3.5, 28.3.4.2	Section 28.1.2
	45.10	There is lack of detail in the information about the technology or 'energy dissipation devices' to mitigate the potential impacts on the Fitzroy River Turtle.	Further information provided to address this.	13.2.1.2	Section 2.1.4
	45.11	No formal assessment has been undertaken using the Significant Impact Guidelines and the Recovery Plan.	Conduct a formal assessment using the Significant Impact Guidelines and Recovery Plan as required in the EIS ToRs.	15	Section 28.1.4
	45.12	Proponent provided a summary of responses to objectives outlined in Recovery Plan. DSEWPaC correspondence 01/09/2011.	DSEWPaC considers that the proponent has not correctly interpreted or applied the Recovery Plan to the proposed action.	15	Section 28.1.4
	45.13	SunWater contention that the Springsure Supergroup community should be defined as a recharge spring rather than a discharge spring as defined in the National Recovery Plan.	Proponent to conduct a scientifically valid groundwater flow study to ascertain localised groundwater flows.	15	Section 28.1.4
	45.14	Complexity of hydrostratigraphy within the study area	Need to conduct further investigation within the groundwater geology to identify paths for preferential aquifer recharge.	15 - 15.1.3.1	Section 15.2.1
	45.15	Proponent reports a modelled artesian surface exists above the ground surface. Accuracy of modelled surface is limited by lack of temporal records.	Installation of a representative number of nested monitoring boxes is required to accurately calibrate this water table surface model. Model future impacts once sufficient data is available on water levels at the 100 identified GAB Springs due to the proposed development.	15 - 15.1.3.5	Section 15.3.1
	45.16	The risk strategy is not supported as an effective measure for mitigating groundwater risks to GAB springs.	Further information provided to address this.	15	Section 28.1.4
	45.17	EIS is considered sufficient for SEWPaC to undertake an assessment.	Statement with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	N/A	Appendix A2-B Section 1.3

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
46	46.1	Pipeline construction - ensure timelines and requirements made by the landholder are met and not treated as merely a guideline.	A contract be entered into by the contractor and landholder and made a condition of the Coordinator-General's Evaluation Report.	29	Section 24.4.1
	46.2	Increased demand made on struggling town infrastructure and social services	Mitigation may take the form of development of social clubs, encouragement of workers to support local businesses etc. Hospital and doctor services need to be increased in the area. Health care issues and support to be coordinated with or between major parties in the area.	24.9	Section 24.6
	46.3	Pipeline and powerlines corridor.	The Coordinator-General should ensure corridor for pipeline and powerlines are coordinated with other major project corridors in the area e.g. Surat Basin Rail and Queensland Gas Corporation (LNG).	1.8	Section 1.4.1
	46.4	The community needs the bridges and roads built and accessible. They need to know how they will get their children to school and where affected landholders are going to go.	Addressing issues in EIS submissions should be made conditional of the Coordinator-General's Evaluation Report.	21.3, 27.3	Section 21.2.2
	46.5	Costing of the resumed land needs to take into account the future earning capacity of land resumed over the life of the property.	Negotiation with landowners required.	25.3	Section 25.3.1
	46.6	Air quality during construction.	Provide the community with a phone number to call to halt construction/ pipe carting etc until issues are resolved. Also provide extra water trucks and lower vehicle travel speeds.	29.9.14	Section 17.3 Section 29.9
	46.7	Uncertainty for landholders affected.	Purchasing of resumed land to be made available to the affected landholders to better enable people to plan their future on their private land with the project	2.4.1.1	Section 24.10
	46.8	Exotic fish travelling up the river.	Develop strategies to prevent exotic fish from moving through the fish and turtleways.	13.2.1.2	Section 13.1
	46.9	Displacement of affected landholders not being able to purchase land locally.	Provide preference to affected and resumed landholders to purchase land locally for dam offsets.	2.4.1.1, 10.4	Section 24.10
	46.10	Inundation will cause a loss of future carbon offsets due to carbon farming opportunities	Do not inundate this area.	10.4	Section 18.3
	46.11	Reassessment of 1-in-100 flood baseline event. Different floods events affect different topographical areas differently.	Undertake an on ground assessment of each property affected.	14.2.3	Section 14.2
	46.12	Blue green algae blooms.	Provide a warning system for water users and riparian zone landholders.	29.10.6	Section 29.5

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
47	47.1	Concern the flooding and death of the riverine corridor will create an extremely long gap in present corridor.	Further study needed.	10, 11	10.2.3
	47.2	Concern 28 mound springs will be inundated by the dam. Do not believe adequate offset exists that would cover this loss.	Further study needed.	15	Section 28.1.4 and Appendix B1-B.
	47.3	Concern regarding protection of the Boggmoss Snail species.	Conduct more research and conduct relocation trials (if necessary) as soon as possible.	11.1.3.5, 28.3.4.2	Section 28.1.2
	47.4	Concern a dam at Nathan would restrict small flows to this impoundment.	Factor environmental flows into the dam's management.	14.1.4.3	Section 14.1.2.1, 14.1.4.1, 14.1.4.2, 14.1.4.3 and 14.1.4.9
	47.5	The dam would increase the height of flooding in Taroom.	Identify what plans will be in put place to manage this situation.	14.2.3	Section 14.2.2
	47.6	The ecology of the area below the dam will be severely altered if the 'break out' of the spring systems at Springwater and Yebna are curtailed due to extraction of CSG water and the dam holds up storm flows.	Further study needed.	14	Section 14.2.1
	47.7	Concern regarding impact on breeding patterns of native fish and turtles.	Described how these impacts will be managed.	13.2.1.2	Section 13.7
	47.8	Concern open cut coal mines above dam site would encroach, if allowed, onto flood plains and present serious contamination problems.	Identify what restrictions will be placed on open-cut coal mines, CSG and reverse osmosis water releases upstream of the dam to prevent contamination.	14	Section 27.4
	47.9	Concern about flooded coal mines. Dewatering of flooded coal mines must be avoided at all costs on the Dawson River.	Statement with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	N/A	Appendix A2-B section 1.1
	47.10	Concern about contamination associated with treated CSG water that is planned to be released into the river above the proposed dam site and contaminated salts extracted from CSG water that are stored in specially constructed facilities upstream of the dam.	Statement with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	N/A	Appendix A2-B section 1.1
	47.11	Concern a pipeline from QGC's Woleebee Gas Fields is programmed to be built in the coming year.	Pipelines should be in a common corridor as much as is practical.	N/A	Appendix A2-B section 1.1
	47.12	Doubt that boggomosses and riparian corridor can be offset successfully.	Statement with no recommendations for the AEIS, but recommendations that are suitable for the EMP.	10.4, 11.1.3.5, 28.3.4.2	Section 10.2.4, 28.1.2 and Appendix B1-B

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	47.13	Not enough emphasis accorded to Bundulla Cemetery and overall importance of that area.	Provide consideration that a large number of graves are located in this area.	1.5.20 and Chapter 22	Section 22.2
	47.14	The current condition of the Dawson River above Glebe Weir is good and heavily controlled.	This section needs to be left in its present condition.	N/A	Appendix A2-B section 1.2
48	48.1	Option 1 and Option 3 pipeline routes are not supported but it is not clear if Option 2 is the accepted route. Miles is now a critical service centre for the energy companies.	Provide confirmation that Option 2 will be the exact location of the pipeline. Acknowledge that that the pipeline route for option 2 bypasses the town of Miles by around 20 km. Consider funding a small lateral offtake and supporting infrastructure from the main pipeline to provide a secure water supply to Miles.	1.7.8.2	Section 1.4.1
	48.2	It is vital that the proponent accounts for any road infrastructure upgrading and maintenance created by the project.	Undertake a comprehensive traffic impact study to assess the impact of the project, particularly on the local road network. Develop mitigation and management measures that will minimise impact on all WDRC roads.	1.7.8.2	Section 21.2.1.1
	48.3	Proponent advises more detail, including mitigation measures proposed, will be provided at the detailed design phase	Submit a Traffic Management Plan for approval prior to commencement of construction phase.	21	Section 21.2.1.1
	48.4	Traffic volumes appear to have been taken from 2009 figures.	Update data.	21.3.2.4.	Section 21.1.1.1
	48.5	18,750 pipes to be hauled from Brisbane via road transport on the Warrego Highway, utilising 306 articulated vehicles per day.	Deliver all pipes via rail to alleviate impacts on Dalby and Chinchilla road users.	21.3.8.5	Section 21.2.1.3
	48.6	Road upgrades and maintenance issues need to be addressed prior to commencement of construction phase.	Enter into infrastructure agreement with WDRC for life of project. Provide funding for road upgrades and additional maintenance during and after the construction phase.	21	Section 21.2.2
	48.7	There is a need to account for any road infrastructure upgrading and maintenance created by the project.	Carry out two joint asset condition assessments - one prior to construction and the second at completion of the project to determine what additional maintenance and restoration work will be required. Fund any identifiable works required.	21	Section 21.2.2
	48.8	Roads to work camps.	All roads providing access to work camps need to be constructed to an all weather access standard with appropriate turning facilities from major roads.	21	Section 21.2.1.2
	48.9	Road access / bushfire risk.	Roads must meet standards for access by emergency vehicles.	21	Section 21.2.1.4

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	48.10	School bus routes.	Ensure all key stakeholders are included in communications regarding changed or impacted bus routes, including school bus operators, school bus committees, parents and WDRC.	29.9.18	Section 29.10
	48.11	An 11% loss of springs in the area is not acceptable.	Further study needed.	10, 10.4 (ES 1.5.8)	Section 28.1.4 Appendix B1-B
	48.12	Town water will not be available for construction purposes.	Source an alternate supply.	2.4.2.13	Section A2-B Section 1.2
	48.13	No details on the remnant vegetation offset strategy.	Describe the offset strategy that will be used for remnant vegetation.	10.4	Section 10.2.4 Appendix B1-B
	48.14	Location of workers accommodation at "Wandoan and Chinchilla will be determined in the detailed project design". "During construction it is likely... workforce will be housed in specially built construction camps".	Identify the exact location of workforce accommodation camps and expected numbers of workers.	2.4.6	Section 2.3.1
	48.15	Waste from camps may not be accepted into existing facilities without major infrastructure upgrades.	Consider the construction of a purpose-built centralised sewage disposal and treatment facility or augmentation of existing town facilities.	2.4.6, 20	Section 2.3.1
	48.16	Town water supply under stress.	Consider augmentation of town water supplies.	2.4.6	Section 2.3.1
	48.17	WDRC Pest Management Plan.	Provide reference to the WDRC Pest Management Plan to ensure coordinated approach maintained.	29.9.11	Section 29.7
	48.18	A large quantity of overburden potentially generated.	Enter into a 'Beneficial Re-use' scheme with WDRC wherein all overburden material of low permeability and other characteristics be delivered to council landfills.	20	Section 6.2 Section 20.4
	48.19	All vehicles entering and leaving the construction sites must be adequately washed down to prevent the spread of noxious weeds.	Provide a contribution of $100,000 towards construction of new wash down facilities in Dalby and Chinchilla for essential use by all vehicles, heavy plant and equipment entering or exiting the region.	25	Section 25.4.4 Section 29.7
	48.20	Concern regarding outdated data and figures relating to Gross Regional Product and Population, non-resident workers and labour force statistics.	Update data to include information contained within latest WDRC Housing Strategy and WDRC Economic Profile which are updated annually.	25.2	Section 25.8
	48.21	Concern regarding statement 'Given a preference to employ local labour where appropriate…'	Provide contribution to Western Downs Housing Trust (Trust) to fund affordable housing for key service workers and low income residents. WDRC will to advise the contribution amount once exact worker numbers are provided.	25.2.3	Section 25.4.1
	48.22	Transport infrastructure under pressure.	Enter into Infrastructure Agreement with WDRC to ensure pressure on transport infrastructure is mitigated.	21, 25	Section 21.2.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	48.23	Concern regarding definition of 'Local Suppliers'.	Provide clarification of the definition of 'local'. Businesses within WDRC area and beyond presume 'local' to be those businesses within the local government area therefore 'local' applying exclusively to them.	25	Section 25.4.5
	48.24	Concerns of no purchases from Western Downs businesses for services or products.	Advise what measures will be undertaken to specifically address how local procurement processes will be established to engage with local and regional businesses. WDRC Major Developments and Economic Strategy Unit is keen to work collaboratively with SunWater in this regard.	25.3.3	Section 25.4.5
	48.25	Concern small rural landfills have minimal capacity to accept significant quantities of waste from construction or worker camps.	Consider alternative waste handling arrangements for all waste types including reuse or recycling of timber packaging waste.	20	Section 20.3
	48.26	No waste projections data has been supplied to WDRC.	Provide waste projections data to WDRC to assist in gauging full impact of waste generation.	20	Section 20.2
	48.27	Concern regarding landfill airspace	WDRC requires $200,000 contribution towards bringing forward of replacement landfill facilities.	20	Section 20.1
	48.28	Normal user pays fees will apply to any waste being disposed of in WDRC facilities. Where landfill estimated to exceed 10,000 tonnes a separate formal agreement is to be entered into with WDRC.	Contribution is to be paid to WDRC prior to commencement of the project.	20	Section 20.1
	48.29	Landholders' concern that water from the project is for resource industry stakeholders and not agriculture has not been expressed in the report.	WDRC requests further investigation be conducted into social impacts and SunWater contribute to a community fund in collaboration with council to mitigate such impacts.	24.9	Section 24.9
	48.30	Concern resource sector activities are increasing demand on community services and facilities whether workforces are housed in workers accommodation or not.	Conduct further investigation into social impacts. SunWater to contribute to a community fund in collaboration with WDRC to mitigate such impacts.	24.9	Section 24.6
	48.31	Concern data contained in report relating to social infrastructure is incorrect - e.g. there is no public transport available at Wandoan Railway Station	Correct data that is wrong.	24.5.6	Section 24.6

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	48.32	Proponent proposes project be designated as 'community infrastructure' meaning no WDRC planning approvals necessary.	Planning exemption is not applicable to work camps, lay down areas and similar facilities nor any new extractive industries - i.e. pits for sand, gravel or rock. WDRC requests details of any properties to be used for sourcing these materials be provided.	7.2.1.1	Section 1.5.2.5 Section 7.1.1
	48.33	Concern raised by landholders regarding chemicals brought onto properties.	WDRC requests that: ▪ data sheets of chemicals brought onto properties must be provided to each landholder; ▪ that the list of chemicals also include quantity of each chemical taken onto the property; ▪ the quality of waste chemicals that are removed from that property also be provided to the landholder.	29.4.1	Section 29.11
	48.34	Concern regarding strain on WDRC resources.	Provide a $150,000 contribution for the preparation of application response.	N/A	Appendix A2-B Section 1.1
49	49.1	Taroom Fishing and Restocking Club Inc would like to see the implementation of fish stocking programme	SunWater to place 500,000 Golden Perch, 100,000 Sleepy Cod and 500,000 Silver Barramundi in dam at 50% capacity	N/A	Appendix A2-B Section 1.1
50.1	50.1	It is not clear how Indigenous FIFO or DIDO workers will be attracted to the project.	Provide clarification on how Indigenous FIFO and DIDO workers from the wider Queensland pool will be attracted to the project.	24.5.2.1	Section 24.2
	50.2	Unemployment statistics used for Cherbourg (6.8%) and Woorabinda (4.6%) are incorrect.	Correct statistics from latest Dept of Education, Employment and Workplace Relations Small Area Labour Markets Data, December Quarter 2011 be used. Correct rate is Cherbourg 12.6% and Woorabinda 76.4%.	24.5.2.1	Section 24.2
	50.3	The statement "Skills Qld will also be engaged to develop strategies…" should also make reference to DATSIMA.	Sentence to be amended to read 'Skills Queensland and the Department of Aboriginal and Torres Strait Islander and Multicultural Affairs will also be engaged to assist SunWater to develop strategies to maximise Indigenous employment in the Project's workforce'.	24.5.2.1	Section 24.2
	50.4	Mitigating measures identify employment and training opportunities.	Suggest implementation of an Indigenous Participation Plan including:	24.8	Section 24.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
			▪ Indigenous cultural awareness training. This will build understanding and knowledge of Indigenous relations and culture at the individual and business unit level; ▪ demonstration of support for Indigenous events, celebrations and awards; ▪ local, regional and state recruitment strategies, processes and systems that are culturally sensitive to the recruitment of Indigenous people; ▪ tailored information provisions to Indigenous people relating to job opportunities available; ▪ set minimum targets for employment of Indigenous people during all stages of the project; ▪ development of an Indigenous mentoring program; ▪ develop an up-skilling program of new and existing Indigenous employees; ▪ development of retention processes and procedures that represent the lifecycle of employment. ▪ setting out how Indigenous businesses will be included in the proponent's supply chain, including for example by accessing advice from the Department of Education, Training and Employment Indigenous Enterprise Development Officer network, and databases such as the Industry Capability Network and Digedi; ▪ embedding the Indigenous assistance strategy into all operations area; ▪ the creation of a pathway between Indigenous school students and work; ▪ how the proponent will build a quality relationship with the local Indigenous community; ▪ how the plan links with pre-existing arrangements e.g. Australian Employment Covenant commitments, Australian Indigenous Minority Supplier Council, Reconciliation Action Plan; and ▪ a requirement that all sub-contractors have an Indigenous employment strategy.		Section 24.2
	50.5	The word Aboriginal appears in document with lower case 'a' rather than uppercase 'A'	Amend all references to 'Aboriginal'.	General	Appendix A2-B Section 2.1
51	51.1	Previous studies by Queensland Museum and BAAM estimate a significantly lower number of Boggomoss Snails than the studies conducted for the EIS.	Conduct an appropriate survey to determine effective population size, historical demographic trends, diversity and population structure and dispersal.	28	Section 28.1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	51.2	Proponent proposes to translocate snails from Mt Rose to existing and new sites - significant impact on the species unlikely.	Fitzroy Basin Association does not support translocation especially not without studies mentioned above being undertaken.	Appendix 11-D	Section 28.1.2
52	52.1	Modelling for the high water mark along Juandah Creek stopped just outside of Taroom.	Please extend modelling for high watermark along Juandah Creek.	14	Section 14.2.2
	52.2	Concern in regards to water backing up for longer during flooding events which will extend periods of landholder isolation and damage grass vegetation.	Raise the level of the bridge and causeway on Yeovil Road Crossing on Juandah Creek.	14	Section 14.2.2
53	54.1	Landholder concern about the pipeline component in regards to erosion and SCL.	Provide economic justification for the dam and more adequately explain the purpose of the pipeline and the role it may have in transporting CSG water out of the region.	1.6	Section 25.3.2 (SCL), Section 25.3.3 (erosion)
	53.1	Concern that information on the project is limited, particularly during the Chinchilla session 18.05.2012. Also concern that existing irrigators in the area have not been properly consulted.	Provide more detail in regards to: 1) the hydrological impact of the dam on the reliability of existing supplemented entitlement holders; 2) the hydrological impact of the dam on reliability of existing flood-harvesting entitlement holders; 3) the hydrological impact on the seasonality of water availability for existing entitlement holders; 4) the impact of the dam operation and water resource sharing rules, particularly during the initial filling stage on reliability of existing entitlement holders; 5) the compensation arrangements for irrigation entitlement holders impacted by the construction of the dam; 6) any additional SunWater cost and charges Dawson River irrigators may face should the dam be built; 7) any opportunity for agriculture to access additional Nathan Dam water at a sustainable cost.	14	Section 14.1.4. For compensation; 7.2.4, 14.3, 25.3.5, 25.3.5.1 and Appendix B14.
54	54.1	The project which was identified in the Central Queensland Water Supply Strategy (CQWSS), is independent to the project being undertaken by GAWB that were also identified in the CQWSS.	Statement with no recommendations for the AEIS.	N/A	Appendix A2-B Section 1.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	54.2	GAWB is the proponent for the Gladstone to Fitzroy Pipeline Project (GFP) which has achieved state and federal government approvals. GAWB as joint proponents with SunWater are also undertaking the Lower Fitzroy River Infrastructure Project (LFRIP). The ToR for the LFRIP was received by the state and federal government and EIS being prepared.	Statement with no recommendations for the AEIS.	N/A	Appendix A2-B Section 1.2
	54.3	The EIS states that water may also be reserved within the storage, as required, to meet critical urban supply needs in the lower Fitzroy and other parts of Queensland.	Statement with no recommendations for the AEIS.	N/A	Appendix A2-B Section 1.2
	54.4	Both the Gladstone to Fitzroy Pipeline and Lower Fitzroy River Infrastructure Project projects are essential for the medium and long-term water supply needs of the Gladstone region. These two projects currently comprise GAWB's preferred augmentation option with the timing of construction dependent upon demand growth or emergent drought conditions.	Statement with no recommendations for the AEIS.	N/A	Appendix A2-B Section 1.2
55	55.1	Stanwell accepts the assurance that dam operation will not impact on water allocation for the Stanwell Power Station and supports the development of the Nathan Dam project.	Should the situation change contact Stanwell.	N/A	Appendix A2-B Section 1.2
56	56.1	The Taroom branch is strongly opposed to the dam for the following reasons: 1) removal of 40-60 km of environmental corridor will impact on fauna and flora; 2) open water storage will affect local landholders by creating a more favourable environment for biting insects and algal blooms; 3) potential for dam leakage due to the site being on a fault line; 4) concern that the earth wall has been untested; 5) no supply of suitable clay has been identified at this stage of planning; 6) the higher wall may impact on the Taroom and Leichhardt Highways during major flooding events; 7) coal companies in the region state that Glebe Weir has sufficient storage to accommodate coal washing needs; 8) concern regarding the concept to supply the CSG industry with water.		14, 29	1) Section 10.2.3 2) Section 29.5 algal blooms, Section 13.9, 29.7 (biting insects) 3) Section 2.1.6 4) Section 2.1.7 5) Section 2.1.8 6) Sections 14.2, 14.2.2

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
57	57.1	Concern regarding the preservation of the heritage-listed Glebe Homestead. Concern that no analysis has been made to determine what actions will be required to preserve the heritage of the Glebe Homestead including its outbuilding and garden setting.	Conduct an analysis to include the following alternatives: ▪ relocation - including a cost benefit analysis of relocation, where the homestead would be relocated to, method of relocation, how the fabric and setting will be conserved during relocation and arrangements for ongoing management after relocation; ▪ recording and abandonment - including how the homestead, outbuildings and setting will be recorded and what offsets would be proposed in regard to the loss of the homestead and outbuildings; ▪ conduct an archaeological investigation over the entire site in conjunction with the custodians at the Taroom Aboriginal Settlement to ensure the record of the site is complete and appropriate conservation measures have been undertaken; ▪ conduct an assessment of the significance of all identified heritage places within the surrounds of the dam and describe the proposed conservation measures for these places.	23	Section 23.1
58	58.1	Concern regarding flooding impacts of the dam on the Taroom region and the ability for residents and businesses to recover financially from these impacts.	Modelling to be conducted, based on 2010/2011 flood levels (when the dam is at full capacity) to map the full extent of future flooding. The full additional extent of flood at FSL should be determined for houses and business areas. Determine compensation measures for those affected by flooding damage associated with the dam. Flood levee needs to be built to protect Taroom, extending from Short Street to the old pumping station. In addition design the dam to include flood gates for flood events.	14.2.3	Section 14.2
	58.2	Concern that the future demand for dam water cannot be accurately determined.	Delay the construction of the dam until the demand is accurately known.	1.3	Sections 1.1 and 25.2
	58.3	Concern regarding UNESCO's view on mining and associated infrastructure development and the Great Barrier Reef.	Delay the construction of the dam until coal development has been adequately assessed to reduce impacts on the Great Barrier Reef.	N/A	Appendix A2-B Section 1.1
	58.4	Concern regarding the cumulative impacts of inundation, pipeline alignment, land lost to offsets, and other development on land productivity.	Provided funding for a study on the cumulative impacts on reduced land productivity on grazing business and the flow on effects.	27	Section 7.2, 7.3, 25.3, 27.2
	58.5	Concern regarding the impact of the dam (e.g. dewatering activities during construction of dam chimney filter) on the water level of the town bore that is used by Taroom.	Develop mitigation strategies and provide funding to support WDRC in the event of negative impact on local water supplies.	15.2.3	Section 15.4.1.

Sub. No.	Issue No.	Issue - Topic	Submitter Recommendations / Suggested Mitigation	Relevant EIS Section	AEIS - Cross reference
	58.6	Concern regarding the impacts associated with increase in number of trucks on the roads in the project area during construction.	Provide funding to upgrade locally used roads to ensure the safety of local road users and trucks. Ensure that trucks are only used during daylight hours to ensure a greater level of road safety.	21.3.8	Section 7.4.1, 21.2.1, 21.2.2, Appendix B29 sections 9.15 and 9.18
	58.7	No mention of Cockatoo Coal's Taroom project in the cumulative impacts section.	Include a discussion on the cumulative impacts associated with Cockatoo Coal's Taroom project in the cumulative impacts section.	27	Section 27.4
	58.8	Concern regarding workforce accommodation camps being close to town, particularly urban land availability.	Refer Issue 7.1	2.4.6	Section 2.3.1
	58.9	Concern regarding the stated local benefits as being incorrect. The benefits are predicated for coal users only.	Delay the dam. Consider the local economic benefit of communities most likely to be affected. Consider funding local development (e.g. childcare, aged care facilities)	25.3.2	Section 25.8.2
	58.3	Concern regarding UNESCO's view on mining and associated infrastructure development and the Great Barrier Reef.	Delay the construction of the dam until coal development has been adequately assessed to reduce impacts on the Great Barrier Reef.	N/A	