

22 List of Proponent Commitments

The proponent commitments are derived from the mitigation measures referred to in the text and also the EMP which SunWater will need to incorporate into the constructors contracts.

General

- SunWater will construct the Glebe option in accordance with the Description of Project provided in this EIS, as developed through detailed design
- SunWater will implement operating procedures as conformance with the ROP and ROL.
- SunWater will undertake the Glebe Option in accordance with a EMP which incorporates the elements of the draft EMP included in this EIS and also including improvements, and particular aspects relating to finalisation of design, construction timetables and all included management plans

Communication with stakeholders and the community

Chapter Reference

<p>During detailed design, the program will include engaging key stakeholders and the community in relation to the following issues:</p> <ul style="list-style-type: none"> • identifying preferred locations for permanent Glebe Option infrastructure and access tracks; • identifying preferred locations for relocated farm infrastructure; • establishing protocols for access during construction and, subsequently, operation; • minimising impacts of works, such as temporary closure of farm and paddock access tracks, temporary opening of fences, and creation of hazards to livestock, during levee and pipeline construction on day-to-day farm operations; • developing preferred ways of managing the lengthened storage perimeter and lands outside stream beds and banks inundated at the raised FSL; and • developing the proposed pipeline start-up program and associated initial monitoring of operations timeframes. 	1.5
<p>During ongoing operations the stakeholder consultation program will focus on issues such as:</p> <ul style="list-style-type: none"> • resolving any unforeseen problems; • advising landholders of any planned rapid draw-downs of the weir storage level; and • advising landholders of significant maintenance works where machinery may require access to their land. 	1.5

<ul style="list-style-type: none"> SunWater will consult with the Department of Natural Resources and Water (NRW) to ensure that management of the storage and downstream releases complies with the requirements of the Fitzroy Basin ROP. Traffic management and access during construction will be discussed primarily with the Department of Transport and shire councils. 	1.5
SunWater will consult with the Banana Shire Council to ensure that the camping and recreation facilities at the weir are fully reinstated at the end of construction works.	1.5
Legislation and approvals	
SunWater will comply with all relevant Commonwealth and State legislation and policy frameworks as appropriate to the Glebe Option	3.2
Land	
7	
The condition of the bed and banks downstream of the weir will be monitored as part of the Glebe Option EMP (Chapter 21).	7.3.2.1
Regular maintenance inspections will be undertaken as detailed in the EMP to monitor erosion.	7.3.2.1
<p>Strategies to ensure long-term landscape stability along the pipeline route will include:</p> <ul style="list-style-type: none"> planning drainage from sites subject to prolonged disturbance and installing sediment barriers and sedimentation ponds where required; minimising exposure of dispersible, sodic subsoil materials; progressive site clearance, pipeline construction and permanent rehabilitation so that areas are exposed for the minimum possible time and there are no appreciable lengths of open trench that can intercept flows and act as drains; placing clay barriers in the bedding sand surrounding the pipe to ensure the sand does not provide a subsurface conduit for downslope water movement; planting quick-growing plant species that are naturalised or native to the area to provide ground cover as soon as work is completed; ensuring that any drainage required for access tracks discharges where flows will spread naturally; ensuring that access tracks do not disrupt flows in natural drainage lines; and monitoring rehabilitation work in accordance with an erosion monitoring program and taking corrective actions immediately any problems occur. 	7.3.2.2
<p>Strategies to reduce visual impacts of the Glebe Option in the vicinity of the weir are to:</p> <ul style="list-style-type: none"> design the weir control room and the weir pumping station control room building to make them sympathetic to the local landscape; plant trees native to the area to shield the above buildings and help them blend in with the scenery of the area; revegetate the constructed levees with naturalised and native grasses in areas where they are not protected by rock mattresses; and plant trees native in the area above the proposed FSL to broaden the riparian vegetation 	7.4.2.1
For the pipeline route visual impacts will be minimized through appropriate design and revegetation of the surrounding areas.	7.4.2.2

<p>Temporary erosion protection measures will be appropriate to the situation and could include:</p> <ul style="list-style-type: none"> ensuring that the temporary crossing over the Dawson River and any other temporary stream crossings needed do not restrict natural flows and have downstream erosion protection where required; diverting overland or channel flow away from disturbed areas; installing flow and sediment control structures on and down slope of disturbed areas; designing landforms on disturbed areas to spread, not concentrate flows; ensuring that potentially dispersible clay subsoil materials are not left exposed; constructing and maintaining sedimentation ponds; and constructing any stockpiles so that the surface is reasonably level, but with sufficient roughness to trap water and aid infiltration as opposed to large conical or elongate crested stockpiles. <p>Long-term erosion protection for disturbed areas will include strategies such as:</p> <ul style="list-style-type: none"> managing potential run-on so that flows are disbursed over the area; avoiding flow concentration within the area, particularly any flow concentration that may run down slope over the pipeline; shaping landforms to provide slopes similar to or lower than those of the surrounding landscape and establishing vegetative cover with species that will provide ground cover rapidly; placing anchored, biodegradable erosion protection or, in some cases, rock mattresses or rip rap in stream channels and on banks while establishing trees, shrubs or ground cover species similar to those that now occur in similar situation (note that trees and shrubs will not be planted within the pipeline maintenance easement); re-creating the natural soil profile as far as is practicable by placing a layer with appreciable water holding capacity, such as a non-sodic clay or clay loam, and covering this with the original topsoil from the site. <p>Natural fertility and other properties of the soils likely to be disturbed by weir and pipeline construction are variable. The following recommendations for soil management have been developed within the Glebe EMP and will be implemented:</p> <ul style="list-style-type: none"> topsoil should only be stripped and stockpiled for subsequent reinstatement or rehabilitation works down to the top of any clay layer or to any appreciable colour change (including any pale grey or white bleached layer) in texture contrast soils; topsoil should only be stripped and stockpiled for subsequent rehabilitation works down to approximately 0.15 m in uniform-textured soils; topsoil should be stockpiled for the minimum practical time before use for reinstatement or rehabilitation to minimise loss of soil biota; topsoil should be returned to the area from which it was stripped wherever practical to minimise the spread of propagules of undesirable plants; application of gypsum at rates equivalent to two to five tonnes per hectare should be considered on disturbed areas where the topsoil is clay because it will improve soil structure and water infiltration; deep subsoil (below approximately 0.8 m) from some Vertosols and Dermosols under brigalow may be acid and, if encountered, should be limed if it is to be placed less than 0.8 m below the surface of any reconstructed soil profile; 	<p>7.6.2</p>
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<ul style="list-style-type: none"> • advice should be sought from Queensland Government Department of Primary Industries as to appropriate fertiliser strategies for rehabilitated areas but it is likely that nitrogen, phosphorus and possibly potassium will aid grass establishment (generally, phosphorus should be applied sparingly or not at all to native trees and shrubs); • works that will result in high levels of soil disturbance or high traffic should be timed for the April to September period when median rainfall is lowest to minimise erosion and soil compaction risk; and • plantings for revegetation purposes should be in place, with adequate temporary erosion protection, by the end of September each year so that spring and summer rainfall will aid establishment. 	
Land tenure – Impacts will be managed by purchasing, leasing, subleasing, or obtaining easements, as appropriate.	7.7.2
<p>Land contamination – a pre-construction inspection will confirm the presence of any contamination and if found, it will be treated in accordance with the EMP</p> <ul style="list-style-type: none"> • The final treatment of potential areas of contamination including areas used for workshops, where spills of fuel, oil, and lubricants are likely will be at the discretion of the contractor but will be in accordance with the controlling regulations and the EMP. 	7.9.2
Water resources and water quality	8
Mitigation of flooding and erosion – Operating rules will be developed for the weir to mitigate these impacts and will be confirmed with NRW.	8.3.3.1, 8.3.3.5
Water harvesting –SunWater and NRW will discuss methods to address the missed pumping opportunity. If required, this may include compensation.	8.3.3.3
Hydrologic flow regime – will comply with the Fitzroy WRP and ROP.	8.3.3.4
<p>Groundwater – In order to reduce any risk associated with waterlogging immediately adjacent to the Boggomoss Creek levee, SunWater will:</p> <ul style="list-style-type: none"> • cease irrigation in at least the two centre pivot locations nearest Boggomoss Creek. The lessee (the land is owned by the State) will be compensated fairly. • Plant a significant barrier of riparian trees to take up any seepage on the outside of the levee. • Install a series of long-term groundwater monitoring bores will be established between the levee and Boggomoss no.8. • If the groundwater monitoring demonstrates persistent elevated groundwater conditions beyond what would normally be experienced, install subsurface drainage to lower shallow groundwater levels. 	8.4.4.1
<p>Surface water quality – The Glebe Option EMP includes mitigation measures such as:</p> <ul style="list-style-type: none"> • an Erosion and Sediment Control Plan • a Stormwater Management • collection and treatment of concrete wastes from batching plants and truck wash-out areas; • bunding and roofing of fuel storage areas and fixed refueling points and provision of clean-up material in case of spills; 	8.5.2.1

<ul style="list-style-type: none"> • bunding and roofing of chemical storage areas and provision of clean-up material in case of spills; • provision of collection, treatment and disposal facilities for sewage and greywater (the latter will be re-used where appropriate); • a Waste Management Plan including minimisation, recycling and disposal; and • training and education of the workforce. <p>The EMP also includes systems for monitoring, reporting and continual improvement of mitigation measures.</p>	
<p>Shallow storage areas –reduce the vegetation cover on the area to be inundated other than a number of larger riparian trees on the edges of the water body</p>	8.5.2.2
<p>Transport</p>	<p>9</p>
<p>Weir construction – SunWater will liaise with Queensland Main Roads, Banana Shire Council, and the Regional Superintendent of Traffic to determine whether some or all of the following should be put in place at the Leichhardt Highway — Glebe Weir Road intersection for the duration of the construction period:</p> <ul style="list-style-type: none"> • road widening and construction of turning lanes; • speed limits that would apply for appropriate distances each side of the intersections; and • warning signs giving notice of trucks turning and entering. <p>A dilapidation survey of Glebe Weir Road will be undertaken prior to commencement of weir construction.</p> <p>Any necessary repairs will be arranged and road condition monitored and maintained in a safe condition throughout construction.</p> <p>Public access to the reserve and camping area at Glebe Weir will not be allowed for safety reasons and also to reduce non-construction use of Glebe Weir Road.</p> <p>Consultations will be held with the Banana Shire and the Regional Superintendent of Traffic as to whether it is desirable to impose an 80 km/hour speed limit on the road for the duration of construction.</p> <p>The weir and weir pumping station construction contractor(s) will prepare and implement a Traffic Management Plan to deal with all phases of the construction program.</p>	9.4.1
<p>Pipeline construction – Mitigation strategies applicable to Glebe Weir Road are generally applicable to the bitumen sealed and paved sections of Nathan Road.</p> <p>Because heavy vehicle traffic will be high, the advisability of upgrading some sections to two sealed and paved lanes to provide safer overtaking opportunities will be investigated.</p> <p>In addition to the strategies developed to minimise transport and traffic impacts from weir and weir pumping station construction, the following strategies will be implemented to reduce traffic impacts from pipeline construction:</p> <ul style="list-style-type: none"> • minimising road closures and, where necessary, providing detours of similar wet weather trafficability to the existing road so that emergency access is possible at all times; • liaising with SBR to investigate whether construction can be staggered to avoid cumulative traffic related impacts; 	9.4.2

<ul style="list-style-type: none"> liaising with local and regional Emergency Services to ensure awareness of works that may slow movement of emergency vehicles; and ensuring that works that require activity on or in the vicinity of roads have the appropriate signage and, where necessary, traffic control personnel or portable traffic lights. <p>SunWater will liaise with Queensland Main Roads, Dalby Regional Council, and the Regional Superintendent of Traffic to determine whether some or all of the following should be put in place at the Leichhardt Highway intersection with Nathan Road for the duration of the construction period:</p> <ul style="list-style-type: none"> road widening and construction of turning lanes; speed limits that would apply for appropriate distances each side of the intersections; and warning signs giving notice of trucks turning and entering. <p>The following strategies will be applied to mitigate impacts of additional traffic on existing and new formed earth roads whether or not they have gravel surfaces:</p> <ul style="list-style-type: none"> arranging for dust suppression when and where this is required; restricting Glebe Weir Project traffic access to essential light vehicles during wet weather; liaising with Banana Shire Council and Dalby Regional Council to determine upgrading and maintenance requirements, and how the necessary work will be undertaken, including: <ul style="list-style-type: none"> imposing speed limits and / or advisory speed signs for the duration of construction works where these are required; upgrading or constructing to two lane gravel standard according to local authority specifications as required; improving low radius curves and creek crossings where required; upgrading culverts and bridge works where required; and monitoring road condition and ensuring maintenance is carried out promptly. 	
Air and greenhouse gas	10
Air quality – Where ERA's are proposed, an air impact assessment and management plan will be undertaken as part of the subsequent development approval process. Collection of ambient data will occur prior to construction commencing.	10.5
<p>Mitigation measures are summarised below and are further developed in the Draft EMP (Chapter 21).</p> <ul style="list-style-type: none"> clearing progressively in order to avoid large areas of bare earth; substituting tasks where possible, with alternative methods that produce less dust (for example, using wet cutting to remove concrete rather than jackhammering); minimising extended engine idling; ensuring regular maintenance of engines, including injectors and exhaust systems, to comply with emission standards; wetting working surfaces for high-impact dust generating activities or using dust collection devices on work tools; minimising vehicle speeds around work areas and using dust suppression techniques on on-site tracks; 	10.5.1

<ul style="list-style-type: none"> • using dust/wind fencing around stockpiles and minimising drop distances onto stockpiles; • using efficient techniques if burning is required; and • establishing an effective complaints registration and handling process. <p>Along the pipeline route dust nuisance can be minimised by clearing only a proportion in advance of the pipe laying and by rapidly rehabilitating the completed works.</p> <p>Grey water from on-site facilities, water captured in sediment traps and rainwater tanks and water from Glebe Weir will be reused for dust suppression. If high levels of dust deposition on vegetation are observed as a consequence of works activities, the vegetation will be sprayed to remove the dust.</p>	
<p>Strategies to reduce the impacts of dust and other emissions from transport activities include:</p> <ul style="list-style-type: none"> • liaising with residents, Banana Shire Council, Dalby Regional Council and the District Superintendent of Traffic concerning the temporary imposition of speed limits; • upgrading and maintaining unsealed roads as required; • watering roads for dust suppression; • covering loads; • minimising extended engine idling; • ensuring regular maintenance of engines, including injectors and exhaust systems, to comply with emission standards; • timetabling of journeys if required to avoid high dust concentrations; and • ensuring a community liaison / complaints process is in place and that complaints are addressed in a timely manner. 	10.5.2
<p>Greenhouse gas reduction – all vegetation cleared will be used (where possible) as millable timber, artisans' raw material, fauna habitat, mulch for site reinstatement or, as a last resort, firewood.</p>	10.6.3.1
<p>Revegetation of cleared areas outside the inundation zone will be undertaken in accordance with current land use as appropriate. If Glebe Weir becomes the long-term water supply option for the Project, that is, the proposed Nathan Dam does not proceed, SunWater has committed to substantial riparian zone rehabilitation, particularly in the area adjacent to the levee on Boggomoss Creek. This practice has the potential to further reduce GHG emissions.</p>	10.6.3.1
<p>Specific strategies to manage, minimise and offset GHG emissions over the life of the Glebe Option are set out below:</p> <ul style="list-style-type: none"> • ensure all vehicles are regularly serviced and maintained and comply with emissions standards; • logistics planning is undertaken to optimise haulage, vehicle and equipment movements and usage (including idling) to reduce emissions; • all wastes are captured and the waste management hierarchy applied to the greatest extent practicable; • spoil is disposed of as close to source as possible and revegetated with appropriate species; • topsoil from areas of Good Quality Agricultural Land to be inundated should be stripped and stockpiled for beneficial reuse as part of this option or other proposed developments in the region; • carbon offsets are implemented through extensive tree plantings on land acquired for the Glebe Option or through agreements with private 	10.6.6

landowners; and	
<ul style="list-style-type: none"> purchase green energy for long-term operational requirements of the weir and pump station. 	
Noise and vibration	11
<p>The assessment framework outlined in the EPA Guideline: Planning for noise control (EPA, 2004a) will be applied to develop appropriate operational noise goals for ERA's associated with the Glebe Option.</p> <p>Detailed noise assessments will be undertaken as part of the subsequent development approval process for each ERA once the particular contractors have been commissioned.</p>	11.4.1
<p>Noise impacts associated with the construction of the weir, pumping station and the pipeline to the Wandoan Coal Project will be minimised by compliance with the Glebe Option environmental management plan (Glebe EMP). The noise management plan incorporates the following noise impact mitigation measures:</p> <ul style="list-style-type: none"> providing and maintaining low-noise equipment and operating it in accordance with manufacturer's instructions; repairing or replacing defective mufflers on plant and equipment; shutting down construction equipment when not in use; setting on-site speed limits; arranging for the camping area at Glebe Weir to be closed during construction; considering substitution of quieter alternative processes when they are available; liaising with the residents of homesteads in the vicinity of works regarding the timing of works and to establish preferred times for undertaking the noisiest of activities (such as pile driving); responding to complaints, monitoring noise if required and taking appropriate action to reduce noise to acceptable levels (it is proposed that noise management be complaints based, with mitigation appropriate to negating the cause of the complaint); and mitigation may include altering the time of the activity, finding and fixing the offending machinery or placing temporary noise barriers and enclosures around noisy activities or along the noise transmission path. 	11.4.1
<p>Liaison with landholders along the pipeline route will be continued both before and throughout the construction period to ensure that farm operations such as cattle handling are not disrupted by noise from construction works.</p>	11.4.1.1
<p>Noise mitigation measures to reduce the impacts associated with the increase in traffic on local roads will include the following:</p> <ul style="list-style-type: none"> using appropriate mufflers on heavy vehicles and avoiding exhaust braking near residences; observance of speed limits; limiting truck movements to the daytime period (i.e. 6:00 am to 6:00 pm); maintaining the road surface at a suitable standard; and responding to complaints, monitoring noise if required and taking appropriate action to reduce noise to acceptable levels (possibly including finding 	11.4.2

and fixing the offending machinery or using acoustic shrouding of engine blocks for heavy vehicles).	
Noise emissions from air compressors and water pumps will be controlled to acceptable levels by ensuring that equipment of appropriate design is installed and maintained, installing sound enclosures over the equipment and designing buildings to contain sound. The design will be based on a noise target developed from monitoring of ambient noise at the camping area prior to construction commencing. The Glebe EMP (Chapter 21) for operations includes a complaints process to respond to issues raised by landholders, residents or the community, monitoring noise according to standard procedures and taking appropriate steps to reduce noise to acceptable levels as soon as possible.	11.5
Nature conservation – Terrestrial	12
Implementation of mitigation and compensatory measures is identified in Tables 12-3 and 12-6 as necessary to reduce identified terrestrial flora impacts to levels that will not cause permanent harm to significant ecosystems or flora populations: <ul style="list-style-type: none"> • Develop and implement a Construction Management Plan; • For affected ecosystems and species – offset through protection of comparable habitat, habitat restoration and enhancement of comparable ecosystems in the local area; • For significant flora species – include seeds or seedlings of local provenance species in habitat rehabilitation and restoration in the local area; • Develop and implement a Weed Management Plan; and • Ensure existing hydrological regimes are maintained for adjacent boggomoss communities. 	12.3.1
For both the weir and pipeline route, four overarching management plans will be developed incorporating relevant sub-plans. These are: <ol style="list-style-type: none"> 1. Clearing Management Plan; 2. Construction Habitat Management Plan; 3. Habitat Rehabilitation Management Plan; and 4. Operational Habitat Management Plan. Details of the plans are provided in Appendix 12-C . For the pipeline construction: <ul style="list-style-type: none"> • The cleared pipeline easement will be rehabilitated by planting with the preferred pasture species in the area. • Once the pipeline is established and the easement rehabilitated, ongoing management will be required to mitigate the impacts of fire and pest species, and protect the integrity of vegetation adjacent to the easement. Pipeline operations management plans will address fire risk associated with maintenance of the easement such as from welding or sparks from vehicles. 	12.3.1
Mitigation of impacts on various fauna species will include: <ul style="list-style-type: none"> • induction training of workers in fauna protection • deployment of fauna spotters and catchers • covering/filling of trenches etc. 	Table 12-12

<ul style="list-style-type: none"> • vegetation offsets and rehabilitation of similar areas to those cleared • retention of log piles on adjacent land • appropriate speed limits for construction vehicles • exclusion of livestock from edges of impoundment • implementation of pest animal and weed management plans • retention of large dead trees where possible • provision of nest boxes in surrounding habitats 	
Aquatic ecology	13
<p>Limit the availability of standing water suitable for mosquito breeding by (Chapter 21) frequently pumping out sediment basins and grading to avoid formation of pools.</p> <p>The intention to extract topsoil from the Cockatoo Creek area should attempt to make areas greater than 0.5 m deep as this will restrict the area of suitable mosquito breeding habitat.</p>	13.4.1.1 and 13.4.2.1
<p>For the construction stage, appropriate mitigation measures are incorporated in the Description of the Project (Chapter 5) or relate to sediment and erosion control issues. Measures that will reduce impact and which will be implemented include:</p> <ul style="list-style-type: none"> • The area physically disturbed will be kept to the minimum necessary. • Works will be undertaken during the dry season. • A construction Environmental Management Plan (EMP) (Chapter 21) provides for the management and minimisation of construction related erosion and sedimentation. • The EMP also responds to the risks posed by construction-related potential contaminants such as on site re-fuelling of machinery. • The streambed at pipeline crossings will be disturbed for only short periods and will be restored to their initial profile and character on completion. • Key habitat features at pipeline crossings to be restored include the sediment profile and the abundance of other physical structure such as logs and boulders which will be stockpiled when first removed then replaced on completion of works. • Riparian areas of the weir will be revegetated with endemic native trees, shrubs and grasses in accordance with the process described in Chapter 12. • Riparian areas along the pipeline route will be revegetated with endemic grasses only because they will be within the maintenance corridor, so trees will not be planted. 	13.4.1.3
<p>A design that minimises suction and incorporates screens at the pump intakes will significantly reduce the risk of plants and animals entering the pipeline. Planned improvement to the intake screens on the current weir outlet will reduce impacts to turtles and this is viewed as a significant benefit.</p>	13.4.2.1
<p>A multi-level offtake will be fitted should Nathan dam not proceed.</p>	13.4.2.1

Matters of national environmental significance	14
<p>Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant) communities – Revegetation adjacent to the inundation area will use species native to the area, including Brigalow where it is the appropriate vegetation type. An Operational Habitat Management Plan will be developed and implemented and will include detection and control of weeds, fire management, and rehabilitation and enhancement of remnants adjacent to the inundation area and pipeline easement to improve their integrity and resilience.</p> <p>Mitigation through the offsetting which is formally required for part of this area under the <i>Vegetation Management Act 1999</i></p>	Table 14.5
<p>Community of native vegetation species dependent on natural discharge of groundwater from the Great Artesian Basin – In order to reduce any risk associated with waterlogging immediately adjacent to the Boggomoss Creek levee, SunWater will:</p> <ul style="list-style-type: none"> • cease irrigation in at least the two centre pivot locations nearest Boggomoss Creek. The lessee (the land is owned by the State) will be compensated fairly. • Plant a significant barrier of riparian trees to take up any seepage on the outside of the levee. • Install a series of long-term groundwater monitoring bores will be established between the levee and Boggomoss no.8. <p>If the groundwater monitoring demonstrates persistent elevated groundwater conditions beyond what would normally be experienced, install subsurface drainage to lower shallow groundwater levels.</p>	Table 14.5
<p>Adclarkia dawsonensis (Boggomoss Snail) – No direct impact is predicted.</p> <p>Workers will be informed not to inspect known habitats.</p> <p>Mitigation strategies will be implemented to reduce the potential for any waterlogging as noted above</p> <p>The flow regime at the downstream location (below Gyrenda Weir) will remain in conformance with environmental flow objectives of the Fitzroy Basin WRP.</p>	Table 14.6
All aspects noted under nature conservation will apply to communities and species of national environmental significance	
Waste	15
<p>Construction waste – Sub-contractors conducting on-site servicing of vehicles and machinery will be required to hold a relevant approval (temporary) ERA 28: Motor Vehicle Workshop under provisions of the EP Act.</p> <p>Oils, grease, hydraulic fluid or chemical waste are to be disposed of in a lawful manner.</p> <p>Appropriate measures will be taken to store, contain and dispose of such wastes in suitable containment devices to ensure prevention and minimisation of releases to land and waters. Such measures include:</p> <ul style="list-style-type: none"> • all liquid contaminants will be stored in designated storage areas and appropriately banded or otherwise contained in accordance with AS 1940 – The Storage and Handling of Flammable and Combustible Liquids; • weekly inspection of work sites will be undertaken to detect any chemical/oil spills; • all spillages of fuels and chemicals in the works area are to be contained and cleaned up immediately using appropriate equipment (e.g. on-site spill kits). Soils that are contaminated by hydrocarbons can be treated by bioremediation techniques on-site, or removed and disposed of at a licensed 	15.4.1

<p>facility;</p> <ul style="list-style-type: none"> servicing of all machinery and equipment is to be conducted off-site except for minor routine activities; and should a significant spill occur which potentially causes or threatens environmental harm, the EPA will be notified, the cause of the incident investigated and effective measures to cease discharge and recover contaminants implemented. <p>Construction and demolition waste will be reused on-site whenever possible; either as raw material or used as fill on-site. No recycling facilities for construction wastes were identified in the area. Nevertheless, further investigation will be undertaken if any of this waste requires to be moved off-site. Packaging materials will be treated as described for office and domestic waste (section 15.3.4).</p>	
<p>Green waste – All vegetation cleared will be recycled wherever possible as millable timber, artisans’ raw material, fauna habitat, mulch for site reinstatement or firewood.</p> <p>Burning on-site would only be considered where material is unable to be re-used or if burnt for energy generation.</p> <p>For the pipeline, little millable timber exists so the remaining material will be mulched other than that which the construction contractor pushes to the edge of the pipeline alignment where it will provide fauna habitat and retard runoff.</p>	15.4.2
<p>Excess spoil – will be used in rehabilitation, levee banks at the weir or for embankments associated with the Surat Basin Rail (SBR) corridor (pending confirmation of need and agreement with SBR). Selective use in appropriate areas (e.g. badly gullied sites) followed by revegetation with trees is an option that will be pursued. Excess spoil which is not re-used will be shaped to conform to the surrounding landscape and revegetated according to the Glebe EMP.</p>	15.4.3
<p>Office and domestic waste – On-site segregation of paper/cardboard, plastic, glass, aluminium cans and scrap steel will be processed at the Biloela transfer station.</p> <p>Segregated materials will be securely stockpiled until an economic volume can be transported.</p> <p>Further investigation of local recycling opportunities will be undertaken; for example, local schools, Scouts or other community groups may be involved in the recycling of aluminium cans.</p> <p>Putrescible wastes generated by mess facilities will be collected on-site in lidded industrial bins stipulated by the EPR Waste.</p> <p>Putrescible waste will not be disposed of on-site, instead it will be transported and disposed of by licensed contractors to appropriate treatment or receiving facilities.</p>	15.4.4
<p>Ablutions – Temporary ablation facilities will be installed at locations (to be confirmed at the detailed design phase) for the weir site and along the pipeline. Excluding portable toilets, sewage produced from these facilities will be stored in a closed tank with appropriate odour treatment. Tanks shall be sized, installed and maintained correctly so as not to result in leaks, overflow sewage or impact the surrounding air quality. Emptying of tanks will be scheduled as appropriate and transport and disposal of sewage will be by a licensed contractor. Portable toilets specifically to be used along the pipeline route, shall be serviced regularly and wastes disposed by a licensed contractor.</p>	
<p>Other forms of waste water – Grey water from the office and showers will be kept separate, labeled as unfit for human consumption and used for dust suppression. Stormwater retained in sediment and erosion control devices will be pumped out and similarly used in dust suppression.</p>	15.4.6

<p>Decommissioning of construction site – At the completion of construction works the work sites will be decommissioned. This includes removal of all temporary buildings and structures and rehabilitation via landscaping. Treatment of all wastes will follow the processes outlined above. Within the construction footprint there are areas that may require specialised attention including decontamination. The final treatment of potential areas of contamination will be at the discretion of the contractor but will be in accordance with the controlling regulations.</p>	15.4.7
<p>Cultural heritage</p>	16
<p>Indigenous Cultural Heritage – Pursuant to the terms of Cultural Heritage Engagement Agreements with the endorsed Aboriginal parties and based on surveys that have identified cultural heritage values within the Glebe Option area, specific tailored management strategies will be adopted to mitigate potential impacts and formalized in Cultural Heritage Management Plans. These will be developed from the management recommendations set out in the survey reports. The recommendations will be discussed, further developed and strategies ultimately determined at CHMP meetings between SunWater and the endorsed Aboriginal parties.</p>	16.1.5
<p>Non-indigenous Cultural Heritage –A cultural heritage survey will be undertaken during the detailed design phase. If any places or sites of cultural heritage significance are encountered, significance assessments and management plans will be developed in accordance with relevant legislation.</p>	16.2.5
<p>Social environment</p>	17
<p>Population, employment and income - Discussions with the relevant councils will elaborate on issues such as amenity, environmental considerations, parking and access, safety and security, amongst other issues associated with the construction accommodation camps. SunWater will pursue potential sites following advice from Council.</p> <ul style="list-style-type: none"> • Continue consultation program with local community and stakeholders for early identification of any adverse issues • Monitor Glebe Option complaints phone line and establish consultation and complaints register • Consult with Council and government regarding detailed planning for construction camps. SunWater and the Contractor will participate in joint management group meetings (Wandoan Joint Venture, Surat Basin Rail, other infrastructure or service providers, local government, government agencies) if this strategy is chosen. 	17.4.1.1
<p>Social, cultural and public safety –will be addressed through Traffic Management Plans and the ongoing consultation and complaints processes</p>	17.4.1.5
<p>Recreational Use of the Weir storage – Following the construction phase, the existing shore-line facilities and attractions at Glebe Weir will be restored including a refurbished boat ramp.</p>	17.4.2.1
<p>Landholder impacts – will be addressed through ongoing consultation. Impacted landowners will be fairly compensated and treated with respect. SunWater will take all reasonable steps to minimize impacts on operation of properties and on the landholders themselves during construction and operation.</p>	17.4.2.2

Economics	18
<ul style="list-style-type: none"> Establish expression of interest process for local contractors and service providers Ensure construction contractor maximises use of local workforce and subcontractors in conformance with Queensland government policy 	
Hazard and risk	19
Dam safety – The ‘Queensland Dam Safety Management Guidelines’ (QDSMG) (NRW, 2007b) will be followed in all design stages associated with the Glebe Option.	19.1
Emergency Management Plan – An Emergency Management Plan will be prepared in accordance with the Queensland State Planning Policy 1/03 ‘Mitigating the Adverse Impacts of Flood, Bushfire and Landslide’ (Department of Emergency Services, 2003) and the requirements of the QDSMG. This emergency plan will be developed and maintained through consultation with local emergency services, stakeholders (NRW) and counter-disaster expertise.	19.4.2
Cumulative impacts	20
Natural environmental values – Cumulative impacts on water quality in the weir will be addressed through the following:	20.2
<ul style="list-style-type: none"> establishing riparian zone fencing on the perimeter of the storage and offstream watering points for stock enhancing the riparian zone of the storage by rehabilitative planting schemes including as part of any offset strategy monitoring stratification and turnover and associated potential blue-green algal blooms and fish kills. 	20.3.1
Social and economic values –The community liaison component of the overall Project EMP and specific Glebe Option EMP will need to be particularly cognizant of cumulative impacts on the local population, and those related to other projects, and be sympathetic to the landholders involved. SunWater commits to participate and contribute in a meaningful manner.	20.3.3.1