

PROPONENT COMMITMENTS

General

- 1.1 SRDC will undertake the design of the dam and the development of operational arrangements in accordance with the Water Resource (Border Rivers) Plan 2003 (amended 2011).
- 1.2 SDRC will continue to implement programs to reduce water usage in SDRC through implementation of the endorsed Drought Management Plan.
- 1.3 SDRC will obtain all necessary approval for the Project as outlined in Appendix C of the Supplementary Report.
- 1.4 The maximum size of the working corridors for the construction of the pipelines are:
 - 12.5m for urban pipeline along New England Highway
 - 7.5m for irrigation pipeline along New England Highway
 - 5m for irrigation pipeline along New England Highway
- 1.5 SDRC will maintain a buffer area of approximately 200 m in width around the inundation area and a total area of 322 ha. The buffer area will protect water quality in the dam and maintain local ecological connectivity.

Topography, Geology, Soils and Geomorphology

- 4.1 SDRC will require the construction contractor prepare a Soil Management Plan (SMP) prior to construction. The SMP must be prepared by a Certified Practicing Soil Scientist (CPSS);
- 4.2 SDRC will require the construction contractor prepare an Erosion and Sediment Control Plan (ESCP) prior to commencement of construction. The ESCP will be prepared by a Certified Practitioner in Erosion and Sediment Control (CPESC) with reference to the guidelines Best Practice Erosion and Sediment Control (IECA 2008).
- 4.3 SRDC will require the construction contractor to restore areas disturbed by construction works.
- 4.4 SRDC will require the construction contractor to rehabilitate the site following construction using soils capable of supporting vegetation communities suitable to the local environment. The disturbed land will be rehabilitated to a condition that is self-sustaining or to a condition where the maintenance needs are consistent with the post construction land use.

Planning and Land Use

- 5.1 Construction activities and the sourcing of most materials for the dam wall conducted within properties acquired for the dam.
- 5.2 SRDC will remove all site infrastructure including landscaping, to ensure the site is compatible in the long term with the surrounding land uses following completion of construction works.
- 5.3 SRDC will maintain access to properties affected by the construction of the pipeline through temporary alternative arrangements.

Land Contamination

- 6.1 SRDC will prepare an Environmental Management Plan contain procedures for the correct disposal of any potentially contaminated soil.

6.1 In the event of a large spill, site will be investigated managed and remediated in accordance with the requirements of the *Environment Protection Act 1994* and the draft guidelines from the EPA

6.3 Standard procedures for the storage, handling, disposal and spill response for potentially hazardous waste materials will follow the Emergency Management Plan.

6.4 Chemical storage will comply with Australian Standards and Material Safety Data Sheets (MSDS) requirements. MSDS for products kept on site will be readily available to employees and contractors.

Surface Water Resources

7.1 SRDC will construct a gauging station upstream of the proposed dam before construction commences.

7.2 SRDC will construct and operate the dam in accordance with the final Border Rivers Resource Operations Plan, to satisfy both the Environmental Flow Objectives (EFOs) and Water Allocation Security Objectives (WASOs).

7.3 SRDC will design and construct all proposed drainage structures associated with the dam including those necessary for supporting facilities such as access roads to the appropriate design standards. All designs will incorporate an appropriate level of flood immunity, minimisation of impacts to upstream landholders and mitigation of the impacts of velocity and scour.

7.4 SRDC will design and Construct the RCC Wall and spillway in accordance with the standards set out in the Australian National Committee on Large Dams (ANCOLD) guidelines.

7.5 SRDC will construct temporary water storages in construction area and treat and reuse of construction water onsite to reduce the impact on other regional water sources.

Surface Water Quality

8.1 SRDC will develop and implement site specific water quality guidelines in a construction EMP.

8.2 SRDC will develop and implement ESCP to protect the water quality in the dam and downstream of any construction areas.

8.3 SRDC will require the construction contractor to implement a program of manual collection of TSS and turbidity will be undertaken fortnightly during construction, inclusive of a variety of weather and runoff conditions.

8.4 SRDC will monitor of turbidity and TSS will during the first year of operations on a monthly basis to establish change in the relationship during infilling and operation.

8.5 SRDC will monitoring of fish, bivalves and sediment at the deepest point within the dam and at one site downstream (<2 km from the dam wall) annually for the life of the monitoring program.

8.6 SRDC will ensure that oil containment booms and oil spill recovery equipment will be available. Emergency response plans will be developed to manage any incidents.

8.7 SRDC will install fixed site water quality loggers at the outlet pipe which is connected to the Urban Pipeline to ensure that water sourced by the Mt Marlay Water Treatment Plant is of a satisfactory quality.

8.8 SRDC will undertake a routine (quarterly) water quality monitoring program in the dam for the first 3 years of operation for the following parameters :

- temperature, pH, and turbidity;
- nuisance algae (with specific reference to blue-green algae) and chlorophyll-a; and
- DO, Total Phosphorous, Total Nitrogen, Iron and Manganese.

8.9 SRDC will develop and implement a baseline monitoring programs for pesticide and herbicide use in drinking water catchments. Monitoring should be implemented in order to ensure that there are no cumulative effects caused by the dam. If exceedance values, listed in the ANZECC guidelines, are reached then targeted monitoring upstream should be conducted in order to locate the source

8.10 SRDC will ensure that controlled burning/slashing and removal of the grass vegetation to ensure water quality in the lake is maintained.

Groundwater

9.1 On-going groundwater monitoring will be undertaken in the immediate vicinity of the dam wall as part of any geotechnical requirements for the Project.

Terrestrial Ecology

10.1 SDRC will avoid threatened flora and vegetation communities along the urban and irrigation pipelines. SDRC will undertake the following during detailed design and construction

- Review of vegetation mapping
- Field survey of mapping of vegetation communities and threatened flora
- Determine appropriate design and construction solution
- Closely supervise construction
- Rehabilitation
- Maintenance

10.2 SDRC will modify the alignment of the proposed Stalling Lane Access to avoid impacts on *Acacia Pubifolia* and *Callistomen Pungens*.

10.3 SDRC will manage the buffer area for conservation purposes. SDRC will develop a Buffer Area Management Plan to provide specific measures to for the regeneration of this area. The vegetation in buffer area is of sufficient size and configured in a way to maintain local ecological connectivity.

10.4 SDRC will fence the buffer area to exclude cattle and other animals.

10.5 SDRC will meet the Project's offset requirement for residual impacts on MNES by securing and managing direct, land based offsets. SDRC will legally secure the final offset area using a legally binding mechanism. The final offset package will be agreed with DotE and offsets will be secured prior to the commencement of clearing activities.

10.6 SDRC will meet the Project's offset requirement for residual impacts on MSES through a land-based offset or an offset payment.

10.7 SDRC will prepare an Offset Area Management Plan (OAMP) for each of the final offset areas. The OAM will be developed in consultation with landholders, government agencies, specialists, qualified ecologists

and on-ground providers. SDRC will ensure offsets areas are managed by appropriately experienced and qualified personnel.

10.8 SDRC will mitigate direct and indirect impacts to the EPBC listed White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland by:

- Progressive rehabilitation of pipeline construction corridors with native ground covers and shrubs
- Rehabilitation of the community in the buffer area in accordance with "A guideline for managing Box-Gum Grassy Woodlands (Rawlings *et al.* 2010)
- The removal of weeds in the buffer area and along the pipeline routes.

10.9 SDRC will develop and implement a Weed Management Plan (WMP) for the buffer area, Stalling Lane Access and urban and irrigation pipelines. Specific control techniques for highly invasive species identified in the locality will be incorporated into the WMP. Only trialled, successful methods will be incorporated into the WMP.

10.10 SDRC will propagate threatened flora species occurring in the inundation area of the proposed dam. Threatened plants will be propagated in accordance with the principles described in Vallee *et al.* (2004) and under the guidance of the OAMP. The OAMP will cover all aspects of seed collection, cutting collection, propagation, retrieval of whole plants from clearing areas, transport, hygiene, planting, timing, maintenance and monitoring.

10.11 SDRC will develop and implement a vertebrate pest management plan across the project area targeting dogs and foxes

10.12 SDRC will salvage suitable habitat features such as large rocks and logs from the inundation area and place these into suitable habitats in adjacent buffer area.

10.13 SDRC will undertake pre-clearing surveys of suitable habitat within the inundation area and relocate individual Granite Belt Thick-Tailed Geckos into suitable habitats within the buffer area.

10.14 SDRC will develop and implement an Environmental Management Plan including the following specific measures:

- Areas to be cleared will be clearly marked by tape, pegs and other means
- Staged clearing to allow safe dispersal of fauna
- Sequential clearing in direction away from threatening processes.
- Fauna/spotter catchers present during clearing activities

Aquatic Ecology

11.1 SDRC will construct a lock-style fishway on the proposed dam to provide fish movement both up- and downstream. The detailed design of the fishway will reflect the ecology of the

11.2 SDRC will prepare a detailed operating manual for the fishway, including all contingency plans. The operation manual will be included with the application for constructing the waterway barrier works.

11.3 SDRC will undertake aquatic ecology monitoring during construction and operation to confirm the absence of direct impacts to key species

11.4 SDRC will include design features on the proposed dam to enable the passage of each species of turtle likely to be found, including Bell's Turtle. The design features will be produced in collaboration with DEHP and DEEDI.

- 11.5 SDRC will undertake a turtle monitoring program for a two year period after construction to assess the effectiveness of turtle passage at Emu Swamp Dam.
- 11.6 SDRC will maintain riparian habitat and in-stream woody debris along dam margins
- 11.7 SDRC will maintain passage for aquatic fauna during construction using diversion channels
- 11.8 SDRC will prepare a management plan to control exotic and pest species such as mosquitofish and goldfish within and downstream of the dam
- 11.9 SDRC will undertake surveys of existing privately owned weirs upstream and downstream of the proposed dam. A team of specialists in consultation with Queensland Fisheries will develop concept designs to improve fish passage at existing weirs. SDRC will engage with weir owners, make concept designs available and a demonstration fishway will be constructed at one of the existing weirs, with the owner's permission, as part of the Project.

Air Quality and Greenhouse

- 12.1 SDRC will require the construction contractor to comply air quality management measures in the Environmental Management Plan.
- 12.2 SRDC will require the construction contractor to undertake dust deposition monitoring to be carried out in the vicinity of sensitive receptors adjacent to the construction site throughout the duration of construction.
- 12.3 SDRC will require the construction contractor to undertake continuous air quality monitoring throughout the construction period to determine compliance with the air quality objectives.
- 12.4 SRDC will actively investigate any dust complaint expeditiously and the complainant will be consulted on the outcomes and proposed future actions.
- 12.5 SRDC will review annual energy use during operation of the dam to assist with on-going management of energy efficiency.

Noise and Vibration

- 13.1 SRDC will require the construction contractor adhering to the construction noise and vibration goals for the Project
- 13.2 SRDC will require the construction contractor to prepare a Noise and Vibration Environmental Management Plan to minimise the noise levels emitted from the construction site.
- 13.3 SDRC will provide acoustic treatment to both of nearest sensitive receivers to comply with the sleep disturbance criteria.
- 13.5 SDRC will require the construction contractor to undertake pre-condition surveys for all properties within 1 km of the dam construction site.
- 13.6 SDRC will require the construction contractor to undertake post-condition surveys will be undertaken to confirm blasting for dam construction has not resulted in impacts to property.
- 13.7 Post-condition surveys will be undertaken to confirm blasting for dam construction has not resulted in impacts to property.

13.8 SRDC will require the construction contractor to notify all residents within a 1 km radius of the blasts to be notified of the blasting activities by at least Monday morning of the week of the blast via letter drop. The notification will include the proposed blasting works including days of the week, time of the day, number of blasts etc.

13.9 SRDC will require the construction contractor to undertake environmental noise compliance monitoring at the nearest sensitive receivers

- at the commencement of construction activities;
- in response to a noise complaint; and
- where a review of upcoming construction schedule indicates a high likelihood for impact.

13.10 SRDC is committed to investigate all complaints about noise promptly and appropriate action will be taken to reduce nuisance impacts. A register of noise complaints will be maintained.

Transport and Infrastructure

14.1 SDRC is committed to providing a Road Impact Assessment, Road Use Management Plan and Pavement Impact Assessment. These assessment and plans will be developed in consultation with the relevant authorities and local community stakeholders. These documents will include the development of a Traffic Management Plan to manage the safety and performance of motorists and during construction. This plan will be developed in consultation with the relevant authorities and local community stakeholders.

14.2 SRDC will require the construction contractor to operate a bus service for the construction work force between the construction site and Stanthorpe to reduce construction traffic.

14.3 SDRC is committed to providing the results of the final Traffic Management Plan (TMP) to the DCS.

14.4 SDRC is committed to consulting with the DTMR:

- During the detailed design phase.
- Regarding maintenance access requirements for the pipeline within state-controlled road reserves.
- Providing "as constructed" drawings.

14.5 The use of a CHR(S) into Fletcher Road as part of the new intersection configuration will be discussed and agreed with DTMR with outcomes incorporated into the design of the intersection upgrade prior to construction.

14.6 SDRC proposes to construct the final access road to the recreation area during construction to minimise noise impacts from machinery and construction traffic.

14.7 As part of the Construction Communication Program a system of complaint reporting, investigation and response will be initiated allowing the local community the opportunity to provide feedback on traffic and safety issues.

14.8 SRDC will require the construction contractor to use established truck routes and arterial roads for the haulage of construction materials in order to minimise truck traffic on local roads. Construction materials will not be brought to site at night to minimise amenity impacts.

14.9 All infrastructure works will be carried out under an Environmental Management Plan to be drafted by relevant authority that will address issues such as vegetation management, erosion control, noise and other

relevant potential impacts. Any roads damaged by haul trucks during construction will be repaired post-construction. Any infrastructure to be relocated will be within existing infrastructure corridors, such as road reserves so that disturbance to land and vegetation is minimised.

Socio Economic

15.1 During the approvals and construction phase of the Project, SRDC will continue ongoing communication with the local community and stakeholders regarding such things as the Project approval process, timelines, key Project milestones, regular construction updates, advice on blasting, transport issues and the results of EMP monitoring .

15.2 SRDC will provide a complaints response system including promotion and provision of phone contact with construction management staff during hours of construction, and a follow up procedure which notifies complainants within 24 hours of the intended response to the issue raised.

Cultural Heritage

16.1 SRDC will review the Cultural Heritage Management Plan (CHMP) with endorsed Aboriginal parties to manage the Aboriginal cultural heritage of the area in a culturally appropriate fashion in the context of the proposed development.

16.2 SRDC will require the construction contractor to incorporate cultural heritage awareness into worker induction programs to minimise the risk of accidental damage to Aboriginal cultural heritage features .

16.4 SRDC will undertake a systematic assessment of the Severn River Mining Precinct to ensure that the type and extent of any surviving archaeological material is researched, investigated, recorded and mitigated (if required).

16.5 SRDC will develop a Heritage Management Plan (HMP) for the entire Project area prior to construction outlining a suitable strategy to protect sites and place of cultural heritage significance.

Visual Amenity

17.1 SRDC/ construction contractor will manage night lighting to ensure lights are focussed on the affected construction areas and to limit extraneous light where necessary.

17.2 SRDC/ construction contractor will protect and native vegetation within the construction area with particular emphasis on conserving vegetation downstream of the dam wall to act as a visual screen.

Waste Management

18.1 SRDC will develop a waste management plan for the site which will include monitoring and auditing. This will include mechanisms to:

- Reduce the amount of wastes generated where possible.
- Wastes (other than natural earth, soil or rocks) will be collected in suitable skips or bins.
- Reusing or recycling waste at an appropriate facility will be done where feasible.

18.2 Any wastes generated will be disposed at an appropriate licensed landfill and a licensed waste contractor will be used to transport wastes off site.

18.3 Any hazardous materials used on site will be recorded in a Hazardous Materials Register.

18.4 A waste management procedure will be developed, incorporating an approved waste tracking system for those wastes requiring tracking.

Hazard Safety and Risk

19.1 During construction SRDC will implement safety standards and occupational health standards that provide a basis for effective management of employee and public health and safety.

19.2 SRDC will provide first aid and emergency rescue facilities and equipment during all phases of the Project. SRDC will ensure that appropriately trained personnel will be on site throughout the life of the project to provide first aid and respond to on-site emergencies as required.

19.3 SRDC is committed to liaising with the DCS during the development of emergency plans including the development of fire management plans.

19.4 MSDS information will be obtained and communicated to all site personnel involved in the storage, handling, use and disposal of hazardous substances and materials.

19.5 As discussed in section 18.5.3 of the EIS SDRC will develop an EAP for the dam. In developing the EAP, SDRC will undertake the following steps:

- determine and identify those conditions that could forewarn of an emergency and specify the actions to be taken and by whom and under what circumstances
- in consultation with the District Disaster Coordinator (DDC) for the impacted area (or the Disaster District Manager from the DCS), identify all jurisdictions, agencies and individuals who should be involved in the EAP (for example, local governments, the Queensland Police Service and downstream residents); and
- identify response actions to be taken in response to potential emergencies.

19.6 SRDC will liaise with local State Emergency Services and local paramedic and hospital services with respect to planning for Emergency response.

19.7 SRDC will complete a Failure Impact Assessment Study according to ANCOLD guidelines. This will include safety management systems will be developed for all operations in line with current guidelines as published by ANCOLD.

19.8 An updated Operations and Maintenance manual will be prepared for the dam.