

G. List of Proponent Commitments

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General

- 1.1 The Proponent will deliver the Project with the intention of compliance with the requirements of the *Water Amendment Regulation (No. 6) 2006*.
- 1.2 The Proponent will undertake the design of the dam and the development of operational arrangements in accordance with the *Water Resource (Gold Coast) Plan 2006*.
- 1.3 The Proponent will construct Hinze Dam Stage 3 in accordance with the Environmental Management System developed for the Project.
- 1.4 The Proponent will maintain an inventory of greenhouse gas emissions for the Project once construction commences, report greenhouse emissions and progress on greenhouse mitigation measures as well as maintain membership of the Commonwealth Government Greenhouse Challenge Program.

Section 4 - Topography, Geomorphology, Geology and Soils

- 4.1 Rehabilitation of the site following construction will be undertaken 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
- 4.2 A rehabilitation plan for the clay borrow area will be developed that considers mountain biking as an end use.
- 4.3 A topsoil management plan will be developed for the clay borrow area to assist with re-establishment of the area.
- 4.4 A quarry rehabilitation plan will be developed that reduces the impacts identified in the visual amenity section and facilitates use consistent with the Recreation master plan.
- 4.5 A landscaping plan for the new recreation area will be designed to accommodate the recreation activities described in the Recreation master plan.
- 4.6 Erosion and sediment control plans will be developed and implemented as part of construction EMPs for any vegetation clearing and/or soil disturbance as part of the construction activities
- 4.7 The Engineering Guidelines for Queensland for Soil Erosion and Sediment Control (IEAust 1996) will be applied.
- 4.8 During the clearance of vegetation to the new FSL the use of blading and grubbing clearing methods will be avoided in order to minimise the impact on the dam water quality. The clearance works will also be staged to reduce the impact on water quality. The scheduling of clearance works outside summer months when high intensity storms are more prevalent will also be considered.

Section 5 – Land Contamination

- 5.1 The Proponent will conduct site investigations and assessments of potential contaminated sites identified to determine the extent of mitigation required.

- 5.2 Investigation, assessment and management of contaminated sites will be undertaken in cooperation with EPA's Contaminated Land Unit and in accordance with the Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland (DEH, 1998), NEPM and national water quality criteria.
- 5.3 All investigations will be carried out by a suitably- qualified investigator in accordance with requirements of the EP Act (1994) and site investigation reports will be submitted with a statutory declaration by the investigator as required by the EPA.
- 5.4 All contaminated land remediation work will be subject to review and approval by an EPA- approved Third Party Reviewer (TPR).
- 5.5 All required remediation and/ or site management will be completed and approved prior to the raising of dam water levels.
- 5.6 Any required long- term monitoring will be provided for in the dam's operation plans.
- 5.7 It is the specific intention of the Proponent that project construction and operation activities will not result in contamination that will result in the land requiring listing on the EPA's Contaminated Land Register (CLR).
- 5.8 Chemicals, fuels, oils and any other substances that, if spilled would cause pollution or contamination of the land or water, will be stored appropriately to minimise the risk of environmental impact.
- 5.9 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.
- 5.10 Smaller quantities of chemicals, fuels and oils will be stored in self bunded pallets, within a bunded area in the workshop, or in a bunded container on the site.
- 5.11 Diesel will be kept in bulk quantities (up to 130,000 L) in double skinned tanks (self bunding).
- 5.12 Waste products, (e.g. oil/water separator waste, sludges and residues), will be contained within weatherproofed, sealed and bunded areas to ensure stability of the waste containment receptacles and prevent any leakages or spills causing environmental harm to soils, surface water or groundwater.
- 5.13 Regular inspections will be carried out of the tanks, bunds and storage areas to ensure integrity.
- 5.14 Standard procedures for the storage, handling, disposal and spill response for potentially hazardous waste materials will follow the Emergency Management Plan.

Section 6 – Land Use and Infrastructure

- 6.1 To offset the closure of the recreation area around the dam wall the Proponent will upgrade the existing boat ramps on the eastern and western arm of the Advancetown Lake. The facilities will include a sealed designated access track and ramp facility, sealed parking area, and also includes public toilet facilities. The western boat ramp upgrade will also include a memorial park in memory of the Guinea family, whose grave sites will be inundated by the proposed new FSL.
- 6.2 The Proponent has prepared a Recreational Master Plan for the Hinze Dam site. The objective of the Master Plan is to provide for long term recreation use that balances the requirements for protecting the water quality, while providing sustainable recreation opportunities for the community. This plan will be implemented as part of this project.

- 6.3 The existing Café facility at the dam will cease operation prior to the construction phase commencing. The Proponent will implement The Recreational Master Plan that includes an interpretive centre, with similar kiosk and food outlet facilities as currently provided by the Cafe.
- 6.4 In consultation with stakeholders the Proponent will identify sites for the relocation of both the Fleay's and Dreamworld koala food plantations which are impacted by the Project.
- 6.5 The access road across the top of the main dam embankment will be reinstated for pedestrian and cycling access upon completion of the construction works as part of the integrated park network.
- 6.6 Access across the top of the main dam embankment will be maintained for Maintenance and Emergency vehicles.
- 6.7 The Proponent will negotiate easements over any freehold properties adversely affected in the 1 in 100 year ARI flood associated with the Project. In the event that a voluntary easement cannot be reached, the easements will be obtained through compulsory acquisition under the provisions of the *Acquisition of Land Act 1964*.
- 6.8 The Proponent will continue negotiations with the State government in relation to offsetting the area of the Numinbah Forest Reserve inundated by the new FSL. In association with the State government a suitable vegetated site will be identified and made available as an offset. It is likely that this area will be sourced from the southern portion of Community Infrastructure Designation lot (Lot 4 SP164198), which is adjacent to the Numinbah Forest Reserve.

Section 7 – Surface Water Resources and Water Quality

- 7.1 During construction the Proponent will continue to operate the dam in accordance with current requirements of its Interim Resource Operations Licence. This will include the maintenance of the current level of environmental flow releases.
- 7.2 The Proponent will undertake construction of the dam upgrade using techniques to ensure water quality and security of water supply are maintained.
- 7.3 The construction program has been developed to ensure that the flood risk associated with the current dam configuration is not increased during construction.
- 7.4 A dam safety flood emergency plan will be implemented during construction to close up any exposed works area prior to flood waters reaching critical levels.
- 7.5 The flooding impacts created by the Project will be mitigated via infrastructure upgrades as detailed in **Section 13** and the acquisition of easements as detailed in **Section 6**.
- 7.6 To protect the water quality in the dam and downstream of any construction areas, erosion and sediment control plans will be developed and implemented. The project will have a site water management system comprised of a series of sediment dams.
- 7.7 The Engineering Guidelines for Queensland for Soil Erosion and Sediment Control (IEAust 1996) will be applied.
- 7.8 Where activities will be undertaken on water, oil containment booms and oil spill recovery equipment will be available. Emergency response plans will be developed to manage any incidents
- 7.9 During construction a routine water quality monitoring program will be implemented within the dam and downstream waterways, measuring a range of physico-chemical parameters and bacterial analysis as appropriate.
- 7.10 Fixed site water quality loggers will be installed at the lower intake and downstream of the Dam wall, to monitor discharges into the Nerang River and at the lower intake tower, to ensure that water sourced by the Molendinar Water Treatment Plant is of a satisfactory quality.

- 7.11 During upgrade works on the upper intake tower a routine water quality monitoring program will be implemented.
- 7.12 All water quality sampling will be undertaken in accordance with the *Water Quality Sampling Manual 3rd edition (EPA 1999)*. The frequency of monitoring and the range of parameters tested during flow and routine monitoring as described in the EIS will be reviewed after the first year of construction.
- 7.13 To ensure water quality in the lake is maintained the Proponent will implement a vegetation clearing and maintenance strategy as detailed in the EIS.
- 7.14 Upon completion of construction the Proponent will continue to monitor water quality in accordance with standard operational procedures.
- 7.15 Upon completion of construction the Proponent will operate the dam to achieve the outcomes specified in the *Water Resource (Gold Coast) Plan 2006*.

Section 8 – Groundwater

- 8.1 Ongoing groundwater monitoring will be undertaken in the immediate vicinity of the dam wall, spillway and saddle dams as part of geotechnical requirements for the Project.

Section 9 – Terrestrial Ecology

- 9.1 The Proponent will implement a compensatory habitat strategy to offset the unavoidable loss of 318 ha of mapped remnant vegetation to be cleared and/or flooded below the proposed FSL, to enable permanent inundation for the water storage. The objectives of the strategy will be twofold; (a) the strategy will seek to comply with the intents of the Queensland *Vegetation Management Act (1999)* and associated Codes and Policies; and (b) the strategy will aim to provide tangible conservation and biodiversity benefits at the local and citywide scale, with an emphasis on threatened species conservation.
- 9.2 The Proponent will develop Translocation Plans (and associated management plans for translocation sites) for significant flora such as Spiny Gardenia, Onion Cedar, *Plectranthus nitidus* and Rough-shelled Bush Nut. It is intended that suitable translocation sites be identified within the study area (above the proposed new FSL), and that propagated individuals of the target species be planted at several sites. These sites will be subject to active management to reduce threatening processes such as weed invasion and fire.
- 9.3 Collection of seeds and cuttings and propagation trials for significant flora known from the study area and the establishment of ex-situ populations of those species will be implemented. Pilot propagation and planting trials will be initiated as soon as practicable to determine the translocation potential of the target species.
- 9.4 Areas to be cleared will be clearly marked by tape, pegs and other means and will conform to the limits on design drawings. Particular attention will be paid to defining the boundaries of clearing where of concern regional ecosystems are present.
- 9.5 All vegetation clearance will be restricted to that necessary for the works.
- 9.6 A Weed Management Plan will be prepared for the Project in accordance, with the EMP, detailing measures to prevent the movement of declared weeds to and from the construction site.

- 9.7 The Proponent will implement a plan for dealing with fauna during vegetation clearing and construction which will outline protocols for dealing with injured wildlife and other necessary actions relating to fauna. The plan will be based on the details contained in the EMPs.

Section 10 – Aquatic Ecology

- 10.1 Investigations into an upstream fish passage based on a trap and transfer system will be undertaken by the Proponent.
- 10.2 The Proponent will carry out additional fish research including fish distribution patterns and fish passage, to be utilized in the refinement of the design and operation of any trap and transfer system.
- 10.3 The potential to engineer more appropriate environmental flows for the Nerang River downstream of the dam while maintaining compliance with the *Water Resource (Gold Coast) Plan 2006* will be investigated.
- 10.4 Further macroinvertebrate surveys will be undertaken during Spring 2007, enabling combined season models to be employed and hence giving a more robust picture of downstream ecosystem health.
- 10.5 Management of the aquatic weeds, including Cumbungi, Water Hyacinth and Salvinia will be undertaken by the Proponent immediately downstream of the dam.
- 10.6 Monitoring of methyl mercury concentrations in recreationally significant fish species will be completed annually prior to completion of the Project.

Section 11 – Air Quality

- 11.1 The risk of impacting on local air quality will be managed as set out in the EMPs
- 11.2 Dust deposition monitoring will be carried out in the vicinity of sensitive receptors adjacent to the construction site throughout the duration of construction.
- 11.3 Any dust complaint will be actively investigated expeditiously and the complainant will be consulted on the outcomes and proposed future actions.
- 11.4 The Proponent will maintain an inventory of greenhouse gas emissions for the Project once construction commences, report greenhouse emissions and progress on greenhouse mitigation measures as well as maintain membership of the Commonwealth Government Greenhouse Challenge Program.

Section 12 – Noise and Vibration

- 12.1 While there are no specific noise guidelines for the construction activities a noise level goal of $L_{Aeq\ 12\ Hr}\ 58\ dB(A)$, consistent with the EPP (Noise) acoustic quality objective, has been developed for the project.
- 12.2 A Noise and Vibration Environmental Management Plan will be developed to minimise the noise levels emitted from the construction site.
- 12.3 Environmental noise compliance monitoring will be conducted on a 24 hour basis at two locations representative of the closest residential areas to the construction activities. Other sensitive receiver locations will be used on an ad hoc basis to monitor specific work activities or in response to a noise complaint. These measured levels will be compared to the project noise goals and reasonable and feasible remedial actions will be implemented, as required.
- 12.4 To ensure that construction works do not cause adverse impacts on sensitive receivers the Proponent will undertake pre-construction condition surveys at potentially affected properties. Monitoring during initial blasting trials will be undertaken at key locations to ensure that any impacts are within or below acceptable limits.

- 12.5 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 noise and other environmental issues.

Section 13 – Transport and Roads

- 13.1 A Traffic Management Plan will be developed to manage the safety and performance of motorists and community (schools) during construction. This plan will be developed in consultation with the relevant authorities and local community stakeholders.
- 13.2 To reduce construction traffic in the Gilston and Advancetown areas the Proponent will operate a bus service for the construction work force between the construction site and key transport hubs on the Gold Coast.
- 13.3 Prior to construction commencing a safety audit of transport routes will be undertaken and works undertaken to ensure the safe passage of construction vehicles (e.g. raise overhead wires, local road widening etc).
- 13.4 An education program will be implemented for the workforce to raise and maintain awareness of issues safety and courtesy issues within the local community. Topics will include but not be limited to speed, fatigue, littering, noise, school zones etc.
- 13.5 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.
- 13.6 A maintenance strategy will be developed in collaboration and agreement with Main Roads to address any accelerated pavement deterioration along transport routes as a result of the construction transport traffic.
- 13.7 The condition of the pavement along transport routes will be monitored continuously throughout the duration of the construction phase of the Project with any routine maintenance issues addressed as required. The Alliance will continue to consult with the Department of Main Roads to establish maintenance requirements to address project impacts.
- 13.8 The stability and integrity of road embankment along Nerang-Murwillumbah Road (Main Roads road 201) and Gold Coast-Springbrook Road (Main Roads road 104) will be investigated. If required works will be undertaken to maintain the stability of these road embankments.
- 13.9 The Proponent will raise a section of the Gold Coast-Springbrook Road over a length of approximately 700 m starting approximately 250 m east of the Little Nerang Creek Bridge to provide 1 in 50 year ARI flood immunity. Access to adjacent properties will be upgraded to suit the proposed new road level. Utilities will be relocated to accommodate the new road formation.
- 13.10 The new road sections will be designed to the satisfaction of the Department of Main Roads.
- 13.11 The Proponent will upgrade the Pocket Road Bridge to provide an adequate level of service to the local community. GCCC and local residents will be consulted in relation to the level of service required.
- 13.12 Vehicular access will be provided across the dam wall and saddle dams for maintenance vehicles and Emergency Services vehicles. Access will also be provided to existing fire trails immediately east of the saddle dam.

- 13.13 As part of the recreation facilities upgrade access will be provided across the dam wall for pedestrians and cyclists as part of the integrated parkland.

Section 14 – Hazard Safety and Risk

- 14.1 During construction the Proponent will implement safety standards and occupational health standards that provide a basis for effective management of employee and public health and safety.
- 14.2 The Proponent will provide first aid and emergency rescue facilities and equipment during all phases of the Project. The Proponent 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.
- 14.3 MSDS information will be obtained and communicated to all site personnel involved in the storage, handling, use and disposal of hazardous substances and materials.
- 14.4 The Proponent will liaise with local State Emergency Services and local paramedic and hospital services with respect to planning for Emergency response.
- 14.5 The Proponent will complete a Failure Impact Assessment Study according to ANCOLD guidelines.
- 14.6 Safety management systems will be developed for all operations in line with current guidelines as published by ANCOLD.
- 14.7 Emergency planning will be implemented in line with Queensland and Australian Emergency Planning Guidelines Codes of Practice.
- 14.8 Emergency Plan detailing each potential hazardous scenario on the site, including evacuation plans and emergency response will be documented prior to dam commissioning.
- 14.9 An updated Operations and Maintenance manual will be prepared for the dam.

Section 15 – Waste Management

- 15.1 The Proponent will develop a waste management plan for the site which will include monitoring and auditing.
- 15.2 The amount of wastes generated will be reduced where possible.
- 15.3 Wastes (other than natural earth, soil or rocks) will be collected in suitable skips or bins.
- 15.4 Reusing or recycling waste at an appropriate facility will be done where feasible.
- 15.5 Wastes will be disposed at an appropriate licensed landfill.
- 15.6 A licensed waste contractor will be used to transport wastes off site.
- 15.7 Any hazardous materials used on site will be recorded in a Hazardous Materials Register.
- 15.8 A waste management procedure will be developed, incorporating an approved waste tracking system for those wastes requiring tracking.

Section 16 – Socio Economic

- 16.1 During the approvals and construction phase of the Project the Proponent 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 . This will be delivered by a site based dedicated communications team.

- 16.2 The Proponent 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.
- 16.3 The Proponent will upgrade its existing boat ramps on the eastern and western arm of the dam prior to the closure of the site for construction activities. This will maintain access to large areas of the dam during the construction phase for water based recreation activities.
- 16.4 To off set the inundation of the existing recreation facilities adjacent to the lake a new lakeside park will be constructed to the west of the spillway in the vicinity of the quarry.
- 16.5 The Proponent will replace the existing café with an interpretative /kiosk/ amenities building constructed on sustainable principles in the vicinity of the new lakeside park.
- 16.6 The recreation areas located below the dam wall will be rehabilitated and the facilities upgraded to include improved pedestrian and bike access through the construction of the new access road and pathways linking with the pedestrian and cycle connection through to the area to the east of the dam wall and the lakeside park and interpretive centre.
- 16.7 Pedestrian and bicycle access will be provided across both the dam wall and saddle dam as part of the integrated parkland concept.
- 16.8 Existing mountain bike trails affected by the construction and raised FSL will be re established.

Section 17 – Cultural Heritage

- 17.1 The Proponent will prepare a Cultural Heritage Management Plan (CHMP) and meet the duty of care standards set by the *Aboriginal Cultural Heritage Act 2003*.
- 17.2 The Proponent will continue to engage with endorsed Aboriginal parties to develop the CHMP in order to manage the Aboriginal cultural heritage of the area in a culturally appropriate fashion in the context of the proposed development.
- 17.3 In order to minimise the risk of accidental damage to Aboriginal cultural heritage features the Proponent will incorporate cultural heritage awareness into worker induction programs.
- 17.4 The Guinea family gravesites will be relocated to an accessible location in a parkland setting. A plaque will be supplied commemorating the Guinea family graves. This process will be carried out with full sensitivity to the nature of the activity and in close consultation with the Guinea family and other interested community members as well as relevant local and State Government agencies.

Section 18 – Visual Amenity

- 18.1 Existing vegetation will be retained on site and only removed where necessary. In particular, a buffer should remain between the clay borrow area and Duncan Road.
- 18.2 Waste generated during construction will be collected and stored neatly on the construction site and removed from site as soon as possible.
- 18.3 The Proponent will ensure that areas where vegetation is removed for construction activities that the areas are progressively rehabilitated to reduce visual impacts.
- 18.4 Dead/dying vegetation which becomes inundated and is visible from prominent viewing locations will be cleared.

- 18.5 Rehabilitation of the quarry and clay borrow area be completed as site works are completed. Rehabilitation will incorporate a selection of indigenous and fast growing plant species that are endemic to the site.
- 18.6 Lighting required for safety and security will be focussed on the areas required, with shields around the globes to limit extraneous light where practical. Lighting of the site will conform to Australian Standards.