**ANNEXURE 2**

**REPORT ON SURFACE WATER FEASIBILITY STUDIES: DWA**

The Inception Report for Phase 2 of the study was approved by DWA in January 2011. This includes the assessment (to feasibility level) of the Voëlvlei Phase 1 option and the potential Michell’s Pass Diversion.  An important outcome of Phase 1 of the Study has been that there is a need to adopt a conservative approach towards the Michell’s Pass design and the intended operation thereof.

The uncertainty regarding the hydrology within the middle Breede River and the fact that the Breede hydrology is out-dated (20years) has lead to the recommendation that DWA considers undertaking a Breede Water Availability Assessment Study (WAAS) before any decisions on additional allocation of water from the Breede are taken.  This would include both potential in-catchment allocations and possible inter-basin transfers.  The Michell’s Pass option is to be assessed on the basis of existing hydrology, but taking a conservative approach in the development of the operating rules.  Whilst a continuous diversion over a period in winter had initially been the approach considered, a more defined operating rule is to be developed in order to determine the value of operating rules that restrict diversions to only those winter months with flows above certain thresholds.

The Water Resource Planning Model (WRPM) is currently being adapted to take into account the various EWR sites.  To do so, the landuse information available from the completed Berg Water Availability Assessment Study (WAAS) is being apportioned into the areas upstream and downstream of the EWR (environmental water requirement) sites.  The Planning Model for the Western Cape System has been updated to use the latest WRPM executable, as well as the latest hydrology.  Some problems were experienced in that the latest version of the WRPM had additional features that needed to be added to the data files. The format of the parameter file created by the Water Resource Information Management System therefore had to be corrected to be compatible with the WRPM.

In January 2011, the aerial survey for the proposed pipeline routes from the Michell’s Pass diversion weir to the receiving tributary of the Klein Berg River, as well as from the Berg River to Voëlvlei Dam, were completed.  River cross-sections across the Berg River at the proposed weir site (Lorelei) have also been completed, as well as at upstream and downstream locations to support design requirements.  The surveyor is currently packaging the data and this will be available by mid-March 2011.  DWA has approved a geotechnical contractor (Fairbrother) to undertake the geotechnical investigations for both the Michell’s Pass and Voëlvlei Phase 1 options.  Challenges have been experienced in terms of getting approval for access to some of the farms along the proposed pipeline route of the Michell’s Pass scheme (for the excavation of trial pits).  There have also been some late objections raised by a legal representative of the WUAs (subsequent to the various previous public meetings) regarding the Michell’s Pass option.

Extensive efforts have been made by the Study Team to accommodate a special meeting directed only at the affected Water User Associations.  After much delay and after receipt of further written objections, a meeting was finally agreed to, and held in Wolseley on 2 March 2011.  All Water User Associations in the affected area were invited to attend.  However, only 5 farmers attended, of which only two represented those impacted by the Michell’s Pass scheme.  As a result the problem of access to the farms for the geotechnical investigation remains unresolved.  Efforts are now being targeted at one-on-one site visits to each and every farmer, so as to explain the scheme concept, provide clarity that this is only a feasibility study, and to try and obtain support from the landowners so that the geotechnical investigation does not become further delayed.  This is particularly important in view of the need to undertake these investigations while the weather is still dry, and to avoid delay to the scheduled study completion date of March 2012.