

## APPENDIX K

### **NEED AND DESIRABILITY OF THE PROPOSED ACTIVITY OR DEVELOPMENT IN TERMS OF THIS DEPARTMENT'S GUIDELINE ON NEED AND DESIRABILITY (MARCH 2013) OR THE DEA'S INTEGRATED ENVIRONMENTAL MANAGEMENT GUIDELINE ON NEED AND DESIRABILITY.**

The consideration of “need and desirability” in EIA decision-making requires the consideration of the strategic context of the development proposal along with the broader societal needs and the public interest. While the concept of need and desirability relates to the type of development being proposed, essentially, the concept of need and desirability can be explained in terms of the general meaning of its two components in which need refers to time and desirability to place – i.e. Is this the right time and is it the right place for locating the type of land-use/activity being proposed? Need and desirability can be equated to wise use of land – i.e. The question of what the most sustainable use of land is.

The proposed enlargement of the dam would allow for the storage of summer irrigation water. The enlargement of the dam would provide a more efficient use of water which has become a scarce resource, especially in the Western Cape. The water stored will be used for the irrigation of orchards (table grapes & citrus) where agriculture remains the backbone of the Western Cape economy and would lead to economic gains.

The proposed development is required to ensure the long-term economic viability and sustainability of the production of table grapes and citrus. The West Coast District Municipality's IDP and SDF identify and support the sustainability and growth of the agricultural sector. One of the main issues highlighted by the West Coast Districts Spatial Development Framework (SDF) is the recent drought and the implications of drought on the agricultural sector. Various climatic drivers, namely higher temperatures and drier conditions further exacerbate the impact of drought events on the agricultural sector, which require careful planning and adequate responses to sustain and grow the agricultural sector. Therefore, there is a need to increase the storage capacity of the Zwartfontein Dam to sustain and irrigate existing orchards especially with regards to the climatic drivers (i.e. higher temperatures and drier conditions).

This is especially the case for the study area located within the Swartland Local Municipality – identified as the most prominent agricultural Local Municipal area within the West Coast District. Moreover, the West Coast District's economy is dominated by manufacturing (20.3% in 2016) and the agricultural sector (at 20.2%, generating R 5 482 300 in 2016). Moreover, there is a need to create employment opportunities. Therefore, there is a need for the proposed dam development to ensure that agricultural productivity of the Zwartfontein Farm is sustained, along with creating employment opportunities, within the study area, local, and district municipal contexts.

The proposed location of the dam site is considered ideally suited for the construction of the Zwartfontein Dam due to the (i) environmental (namely soil and climatic conditions) and (ii) proximity to the Cape Town Harbour (situated approximately 60km as the crow flies). This provides the ideal location for the table grape and citrus industry to grow and contribute to socioeconomic development within local and district contexts. From an engineering perspective, the location was chosen to ensure the project life cycle costs are minimised where the decisive factors typically include basin characteristics with reference to available capacity versus demand, optimal costing of works, risk, etc. The location is preferred based on the location of the existing Zwartfontein Dam. The

site is largely surrounded by agricultural activities and will therefore not be “out of character” with the surrounding land use and is expected to have a negligible impact on the visual character of the area.