

P570-Jul18

PO Box 455 Somerset Mall 7137 Tel: (021) 851 0555 toni@bluescience.co.za 31 August 2018

Clinton Geyser EnviroAfrica cc P.O. Box 5367 Helderberg 7135

Dear Clinton

FRESHWATER OPINION ON THE PRESENCE OF AQUATIC FEATURES WITHIN THE AREA BEING CONSIDERED FOR THE DEVELOPMENT OF CULTIVATED AREAS WITH RUSTENBERG WINES, REMAINDER OF FARM 56, SCHOONGEZICHT IN STELLENBOSCH

Rustenberg Wines proposes the further development of approximately 5.13ha of cultivated areas within Remainder of Farm 56, Schoongezicht in Stellenbosch (Figure 1). The land proposed to be cultivated is located on the hillside in the upper reaches of the Kromme River, a tributary of the Eerste River. Mapping of the area indicates that there is a small valley on the western edge of the site that contains a small watercourse. A freshwater opinion was deemed necessary to confirm whether a watercourse is in fact present within the valley.

There are no mapped Freshwater Ecosystem Priority Area (FEPA) wetlands (Figure 2) mapped in the National FEPA for the area to be cultivated, only the two dams to the east and south of the site that are mapped as artificial wetlands. The 2017 Western Cape Biodiversity Spatial Plan map has mapped the site as an Ecological Support Area with the valley indicated as associated with a watercourse (Figure 3). The wetland area at the head of the two dams are mapped as natural FEPA wetland and an aquatic Critical Biodiversity Area.

The site lies within the Boland Granite Fynbos vegetation type which was re-assessed in 2014 and recommended to be classified as Vulnerable. The site was cleared for vines over 10 years ago but was never developed and has been lying fallow since then. The current vegetation on the hilltop comprises of a mix of indigenous terrestrial plants and alien *Acacia* and *Eucalyptus* trees. Within the valley floor

where the watercourses is indicated is dominated with invasive alien kikyuy *Pennisetum clandestinum* grass. The floor of the valley is fairly flat with no visible watercourse channel or indicative riparian or instream aquatic vegetation. A farm track is located largely within the lowest point of the valley (Figure 4).

Inspection of the past aerial imagery taken in 1938, indicates that most of the study area with the exception of the very top of the hilltop was cultivated and that no wetland areas were present within this area (Figure 5). There is a narrow vegetated watercourse visible in the image. This feature seems to have been small and was no longer evident in the landscape today.

From the above, it can thus be said that there are nolonger any watercourse within the study area. It can thus also be said that no water use activity would be triggered with the proposed cultivation of the valley as there would not be any change made to a bed. Banks or characteristic of any watercourse nor would any flow in a watercourse need to be impeded or diverted. The proposed activities are also located approximately 75m upstream of the more natural wetland areas associated with the downstream dams and are unlikely to impact on these aquatic features.

Please feel free to contact me should you have any questions regarding the above.

Kind regards

Toni Belcher (P. Sci. Nat. 400040/10)



Figure 1. Topographical map (3318DD) showing the locality of the study site (red polygon)



Figure 2. Mapped Freshwater Ecosystem Priority Area wetlands as well as the National Geo-spatial Information rivers near the study area



Figure 3. Western Cape Biodiversity Spatial Plan for the study area (CapeFarmMapper, 2017)



Figure 4. View of the valley as seen from the upper (top), centre (middle) and lower (bottom) edge of the site



Figure 5. Aerial image of the study area taken in 1938

APPENDIX 1: DECLARATION OF INDEPENDENCE BY THE INDEPENDENT PERSON WHO COMPILED A SPECIALIST REPORT OR UNDERTOOK A SPECIALIST PROCESS

I, Antonia Belcher, as the appointed independent specialist hereby declare that I:

- act/ed as the independent specialist in this application;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations and any specific environmental management Act;
- have no and will not have any vested interest in the proposed activity proceeding;
- have disclosed, to the applicant, EAP and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the specialist input/study was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments on the specialist input/study;
- have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;
- have ensured that the names of all interested and affected parties that participated in terms
 of the specialist input/study were recorded in the register of interested and affected parties
 who participated in the public participation process;
- have provided the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not; and
- am aware that a false declaration is an offence.

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Signature of the specialist:

Date: 31 August 2018

ABBREVIATED CURRICULUM VITAE:

Full Name	Antonia Belcher
Nationality	South African
Profession	Aquatic Ecologist and Environmental Management(P. Sci. Nat. 400040/10)
Years in Profession	27+ years

Professional Qualifications:

1984	Matriculation	Lawson Brown High School
1987	B.Sc. – Mathematics, Applied Mathematics	University of Port Elizabeth
1989	B.Sc. (Hons) – Oceanography	University of Port Elizabeth
1998	M.Sc. – Environmental Management (cum laude	e) Potchefstroom University

Key Skills:

Areas of specialisation: Water education, Monitoring and evaluation of water resouces, Catchment management, River, wetland and estuary management, Water resource legislation, Water resource institutions, River classification, River Reserve determination and implementation, Aquatic ecosystem assessments (Environmental Impact Assessments) and water use authorisations.

Toni Belcher has worked in the Department of Water Affairs and Forestry for more than 17 years. During this period, she worked for the Directorate Water Quality Management, the Institute for Water Quality Studies and the Western Cape Regional Office and has built up a wide skills base on water resource management and water resource quality for rivers, estuaries and the coastal marine environment. Prior to this she taught mathematics for a period of two years. She is currently working BlueScience in the fields of water resource and water environmental education, as well as undertaking aquatic ecosystem assessments for environmental impact assessment and water use authorisation purposes. In 2006 she was awarded a Woman in Water award for Environmental Education and was a runner up for the Woman in Water prize for Water Research.

Summary of Experience:

Part-time field researcher, Department of Oceanography, University of Port
Elizabeth
Mathematics tutor and administrator, Master Maths, Randburg and Braamfontein
Colleges, Johannesburg
Water Pollution Control Officer, Water Quality Management, Department of Water
Affairs, Pretoria
Hydrologist and Assistant Director, Institute for Water Quality Studies, Department
of Water Affairs and Forestry, Pretoria
Assistant and Deputy Director, Water Resource Protection, Western Cape Regional
Office, Department of Water Affairs, Cape Town
Self-employed

Papers and Publications:

More than 300 publications, papers and posters relating mostly to water resource quality and river health assessments in South African rivers and their management.

Recent projects that she has been involved in are:

- Classification of Water Resources in the Olifants-Doorn Water Management Areas, Department of Water Affairs;
- Development and piloting of a National Strategy to Improve Gender Representation in Water Management Institutions, where the focus is on improving the capacity to participate in water related decision making, Department of Water Affairs and Forestry;
- Compilation of a background document as well as a framework management plan towards the development of an integrated water resources management plan for the Sandveld;
- Specialist on the City of Cape Town project: Determination of additional resources to manage pollution in stormwater and river systems;
- River Health Programme monitoring for the Free State Region, Department of Water Affairs; and
- Framework for Education and Training in Water (FETWATER), Resource Directed Measures Network partner which has undertaken training initiatives on environmental water requirements in the SADC region.