27 Heron Circle
Kommetjie
7975
09.02.2026

Enviro-EAP Environmental Consultants
Att: Nicolaas Hanekom

PROPOSED DEVELOPMENT OF A WATER TREATMENT WORKS, REMAINDER ERF 557 AND ERF 672, HEIDELBERG, HESSEQUA MUNICIPALITY WESTERN CAPE

PEER REVIEW OF AQUATIC BIODIVERSITY COMPLIANCE STATEMENT (ENVIRO-EAP, 2025)

1 Background

The Hessequa Municipality proposes the development of a new Water Treatment Works (WTW) on Remainder Erf 557 and Erf 672, Heidelberg in the Western Cape as indicated in Figure 1. The proposed development requires environmental authorisation in terms of the NEMA EIA Regulations (2014, as amended) and a Water Use licence (WUL) in terms of the National Water Act (NWA, Act 36 of 1998), given that the development triggers NEMA-listed activities and NWA Section 21 c and i activities.

Given the requirement for prior environmental authorisation in terms of the NEMA EIA Regulations, there is a mandatory requirement to apply the national, web-based Screening Tool to the site in question as this determines the suite and scope of specialist studies that must be conducted as part of such a process. The Screening Tool indicated the site to have a LOW sensitivity for the Aquatic Biodiversity Theme which means that if after groundtruthing the site is confirmed to have a LOW sensitivity for the Aquatic Biodiversity Theme then only an Aquatic Biodiversity Compliance Statement is required. The Hessequa Municipality appointed Enviro-EAP Environmental Consultants ("Enviro-EAP") as the Aquatic Biodiversity specialist who then determined that the site has a LOW sensitivity and accordingly conducted an Aquatic Biodiversity Compliance Statement.

However, the authority with competency over the NEMA EIA Regulations, the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP), indicated the Enviro-EAP does not have the requisite expertise to conduct specialist aquatic biodiversity assessments and therefore a SACNASP registered scientist with expertise in the field of aquatic ecology must conduct an independent peer review of the Enviro-EAP Aquatic Biodiversity Compliance Statement. EnviroSwift Western Cape ("EnviroSwift") was accordingly appointed by Enviro-EAP to conduct the independent peer review. The CV of the review specialist, Mr Nick Steytler of EnviroSwift, is provided as Appendix A.

In order to provide this input EnviroSwift conducted a site visit on 27 October 2025. This letter-format report outlines the findings of this peer review.

Figure 1: Location of the proposed site.

2 Description of the proposed development

The following project description was taken from the Enviro-EAP report:

Water will be pumped from the Bloekombos Dam and treated at the proposed WTW from where it will be pumped along a new pipeline to be laid within the road reserve along Muir Street from where it will connect with existing bulk distribution system in Heidelberg. The proposed development site is accessed off Muir Street.

The expected footprint for the WTW infrastructure will be approximately 0.5ha and consist of the following:

- WTW package plant with maximum capacity of 3 000m³/day (3Ml/day) 100m² footprint
- Surface abstraction by floating pumps from Bloekombos Dam on a variable demand basis along an 60m long x 200mm uPVC pipeline above ground where it goes over and along the dam wall and below ground from the foot of the dam wall to the WTW.
- 3 x Sludge settling ponds (27m x 12m x 1.8m deep with 518m³ capacity each) for backwash water collections and sludge settlement. The proposed cut and fil construction of the three sludge settling lagoons, will have 3m high support embankments with a total 1200m² footprint
- A collector sump and pumps for return flow of supernatant from sludge dams back into Bloekombos dam via the canal to optimise water use. Return flow water to be pumped along an underground 110mm x 187m long uPVC pipe to the canal inlet point at the Dam
- A pump station and 200mm x 650m uPVC pipeline for final water distribution from the WTW into the bulk distribution system in Heidelberg via Muir Street.
- Vehicle parking and materials storage area 260m²
- Stormwater Pipeline of 68m x 450mm concrete class 100D and Sludge dams overflow pipeline 34m x 110uPVC with outlet headwall within non-perennial drainage line.
- Widening and re-alignment of existing 3m wide access road from Muir Street by 1m (84m long x 4m wide), and three 4m access roads total distance 72m to sludge dams.
- A 3 phase 400/230V nominal supply at 50hz from nearest transformer with 55m long underground cable.

Importantly, from an aquatic biodiversity perspective, is the proposal that the overflow from the settling dams will be discharged into an artificial reed bed from where the overflow will be pumped back to the Bloekombos dam. This aspect of the proposed WTW is intended to eliminate risks to the non-perennial river/unchanneled valley bottom wetland which otherwise would have received the overflows thereby altering the flow regime and potentially causing water quality impairment in these downstream receiving freshwater ecosystems.

Figure 2 shows the layout of the proposed WTW.

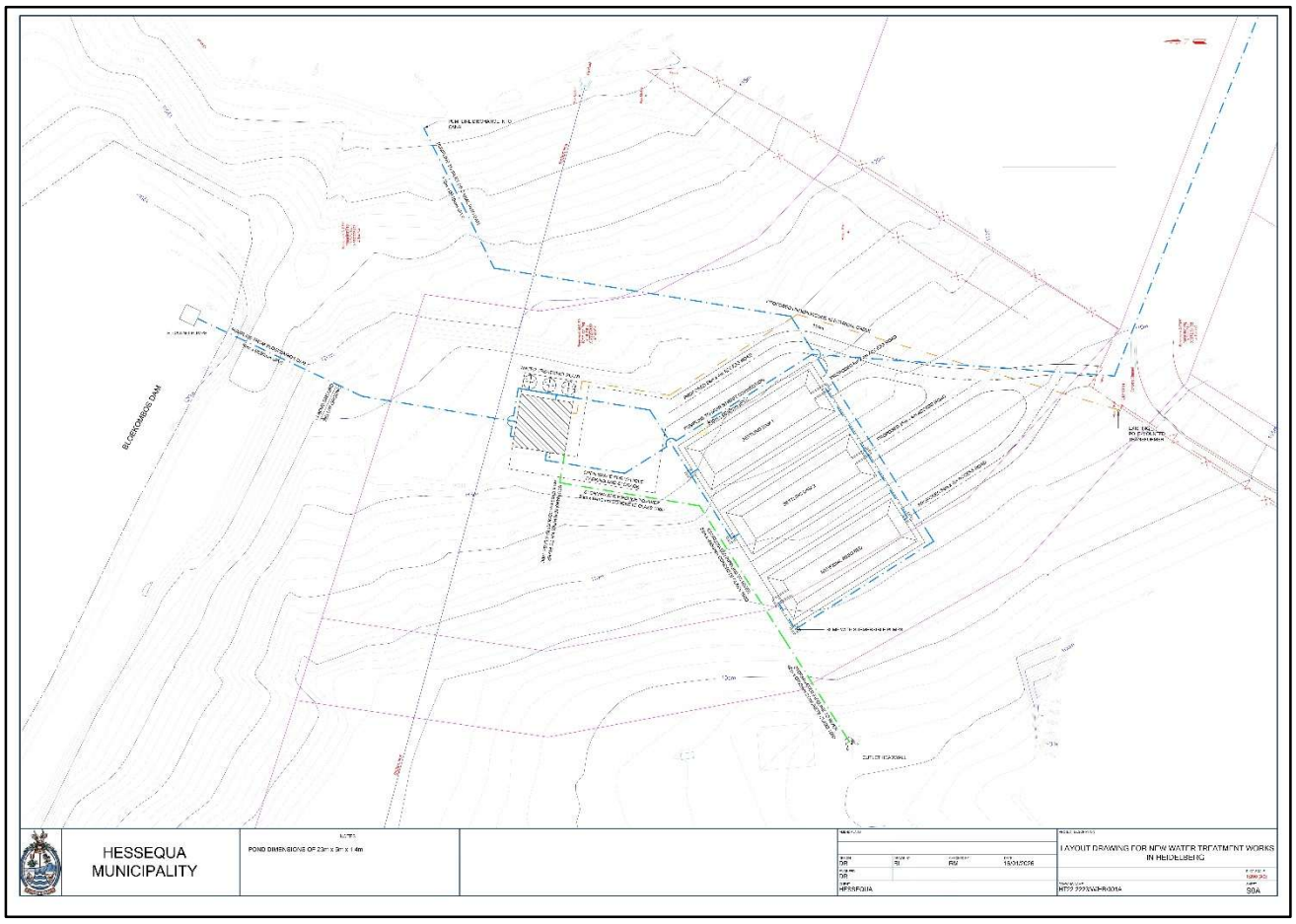

Figure 2: Layout of the proposed WTW.

3 Aquatic Biodiversity Sensitivity of the Site

This independent peer review must first evaluate Enviro-EAPs rationale for confirming the LOW aquatic biodiversity sensitivity of the site as indicated by the screening tool. It is important to note that no clear guidance is provided in the applicable Protocol's or by the authorities as to how aquatic sensitivity for site's should be verified or disputed. A working group comprising a group of aquatic scientists including Dr Liz Day and Mr Dean Ollis (the author of this report is also a participant of the working group) has been discussing this short-coming and has come up with an approach to this issue which is that if any aquatic ecosystems (i.e. streams or wetlands) occur within the confines of the development site then the aquatic biodiversity sensitivity would be VERY HIGH. Give that groundtruthing undertaken by EnviroSwift confirmed no aquatic ecosystems within the footprint of the proposed WTW (see Section 5), the determination by Enviro-EAP that the site has a LOW aquatic biodiversity sensitivity is supported.

Figure 3: Map showing the proposed development in relation to a confirmed watercourse shown as a blue line and polygon as delineated by Enviro-EAP. Note the proximity of the proposed WTW to the watercourse.

Figure 4: Photograph of the site for the proposed WTW (indicated as a yellow oval) looking from the reservoir wall in a southerly direction. Note that the site is located upslope and in close proximity to the watercourse (shown as a white stippled line).

4 Desktop study to determine the freshwater ecological context

In accordance with accepted best-practise the aquatic biodiversity specialist must consult available online databases including but not limited to databases and maps that show the alignment of drainage lines (both perennial and non-perennial), wetlands and also the biodiversity conservation importance of the site. In the opinion of EnviroSwift the following databases should at a minimum be consulted:

- National Geospatial Information and Vector data for rivers (NGI Rivers database, available on Cape Farm Mapper);
- The National Wetlands Map Vers. 5 (CSIR, 2018, available on Cape Farm Mapper); and
- The Western Cape Biodiversity Spatial Plan (WCBSP, 2023, also available on Cape Farm Mapper).

Enviro-EAP has only presented a map generated from Cape Farm Mapper which reflects the WCBSP (2023 – note Enviro-EAP incorrectly refers to 2024!). Enviro-EAP does also make reference to the National Freshwater Ecosystems Priority Assessment (NFEPA, 2011) which is also supported but given that no review of any national rivers or the current wetland mapping *viz-a-viz* the NWM5 appears to have been undertaken, it is considered a short-coming of the desktop component of the study.

Figure 5 below presents a combined map of the NGI Rivers database and the NWM5. The map confirms the likely alignment of a non-perennial drainage line transecting the proposed site and also the mapped presence of wetland downslope of the site and within the NWA 500m regulated area for wetlands. What this means in terms of conducting aquatic biodiversity specialist studies, irrespective of whether the study is only a Compliance Statement or a detailed Aquatic Biodiversity Assessment, is that these mapped watercourses (drainage lines and wetlands need to be groundtruthed and if found to exist, delineated and classified as either a river system driven by predominantly alluvial processes or a wetland if driven mostly by groundwater (see following section).

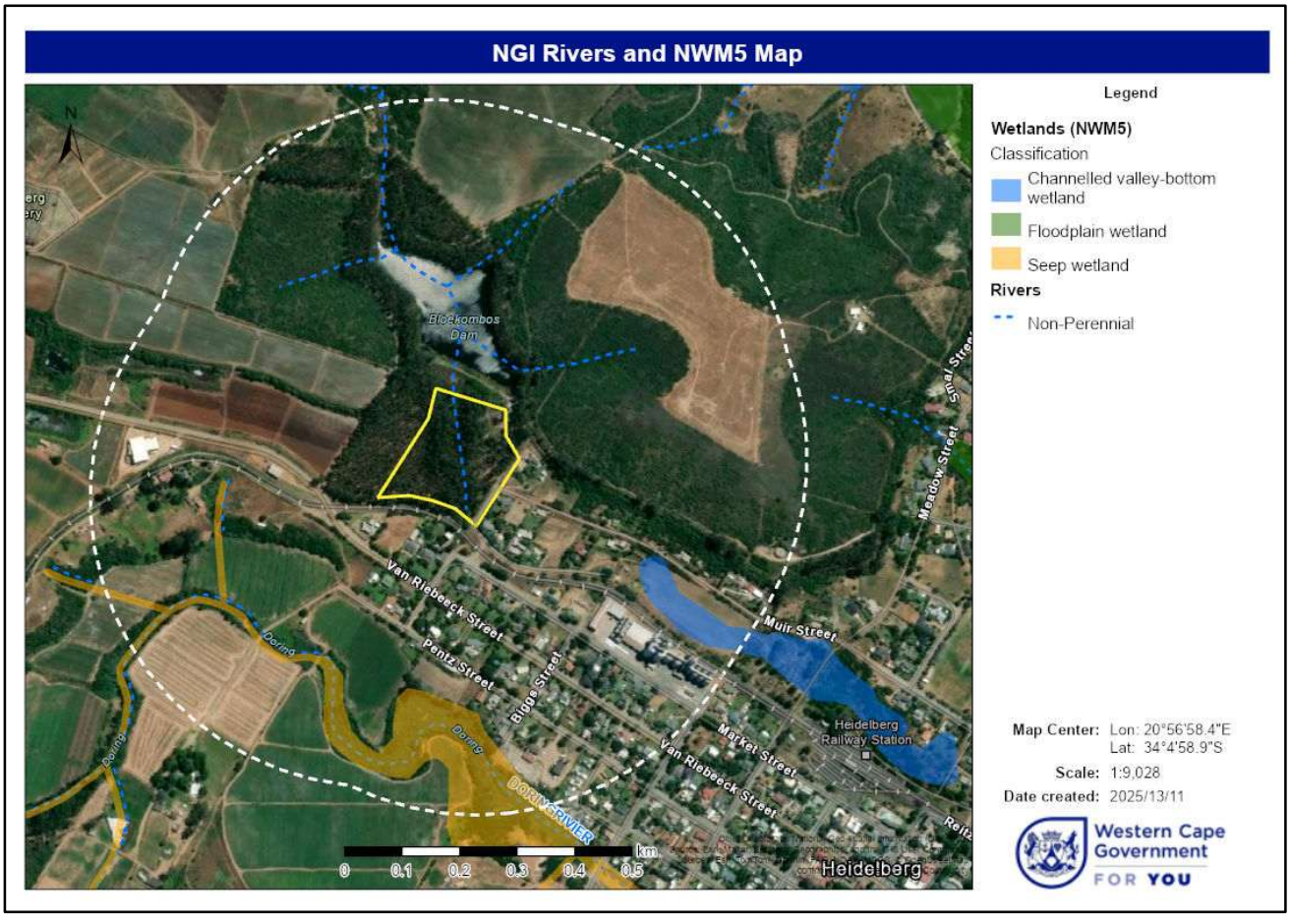

Figure 5: NGI Rivers and NWM5 Map.

5 Groundtruthing and delineation of watercourses

Enviro-EAP indicates that the original non-perennial river is located approximately 16m west of the main component of the proposed WTW and that this drainage line flows up to a point where it reaches the railway line just beyond the sites southern boundary where it forms a pond that supports wetland vegetation. While the report refers to the non-perennial drainage line and its associated wetlands, no delineation map is presented which indicates where the wetlands are located and where the drainage line is located. It is critical that these two types of freshwater features are separately delineated and shown in a delineation map. This is a further short-coming of the report.

During the EnviroSwift site visit in October 2025 the various mapped freshwater features, and as such are considered areas of interest, were groundtruthed including the following:

- The reservoir (see Figure 6);
- The non-perennial drainage line that has been impounded to create the reservoir (see Figure 7);
- The portion of the non-perennial drainage below the dam wall (see Figure 8); and
- The area to the south east of the site where a large channelled valley bottom wetland is mapped to occur (see Figure 9).

The incidental wetlands observed on the dam wall (indicated by the presence of *T. capensis*) and mapped on the NFEPA wetlands layer as artificial wetlands were confirmed to comprise artificial wetlands and as such are not of any concern from a freshwater ecological perspective. They are also upslope of the proposed site and as such would not be at risk of being impacted.

As described above, the channel of the non-perennial drainage line exhibits wetland permanent zone characteristics which can only be confirmed through augering. The valley floor in this area is wider than the channel and there is a strong possibility that the valley floor comprises wetland seasonal/temporary zones which again can only be confirmed on the basis of augering. If the risk to these likely off-site aquatic ecosystems can be eliminated then confirming their extent and hydrogeomorphic type adds little value to the scope of the reporting.

The channelled valley bottom wetland mapped to occur to the south east of the proposed site (see Figure 5) was searched and could not be detected. Enviro-EAP also failed to identify any wetland in this area and it is therefore concluded that this mapped feature does not exist.

Figure 6: Photograph of the reservoir that will be source of water for the proposed WTW.

Figure 7: The dam wall of the reservoir showing evidence of an "incidental" or man-made wetland (due to the presence of *Typha capensis*) due to seepage from the dam wall.

Figure 8: View from the dam wall looking towards the non-perennial drainage line. The presence of Typha capensis in this area suggests the presence of wetland permanent conditions as *T. capensis* is an indicator of permanent levels of soil saturation.

Figure 9: View from Muir Road looking toward the mapped position of the channelled valley bottom wetland. Note the lack of any wetland indicators.

6 Provision of Impact Management and Mitigation Measures

Enviro-EAP indicates that the following impact management measures must be implemented and included in the EMPr:

- Undertake development activities only in identified and specifically demarcated areas.
- Storm water and erosion control measures must be implemented during the construction phase and monitored to prevent siltation, flooding or erosion.
- All roads need to be maintained and monitored. Visible signs of possible erosion must be immediately rehabilitated.'
- Construction and operational activities of the development must not lead to environmental pollution and waste management measures must be implemented in accordance with an Environmental Management Programme.
- Stormwater discharge into the non-perennial drainage line must not cause erosion and this should be monitored on a regular basis and especially after heavy rains.
- No developments may occur within 100m from any drainage line or 500m from any wetland without determining requirement for water use authorisation from Department of Water and Sanitation or the Breede Gouritz Catchment Management Agency.

EnviroSwift believes that while these recommended measures are applicable they need to be more detailed and prescriptive. For example, it is a requirement for the specialist to identify No-Go areas rather than to indicate that development should only be undertaken in "identified and specifically demarcated areas". The specialist must identify the areas in the Compliance Statement and also should consider whether buffers are applicable. Generally, the delineated feature and its buffer would be considered as No-Go areas and if any construction activities are required within the No-Go areas then this should only be permissible via an ECO-approved method statement. Another example relates to the recommendation that the overflow discharge from the sludge dam should be discharged into the channel of the drainage line/channelled valley bottom wetland in such a manner that erosion does not occur. EnviroSwift believes that the specialist should provide a specification for the design of an energy dissipation structure and that this be recommended as an essential mitigation measure.

7 Conclusion and Way Foward

The peer review of the Enviro-EAP (2025) Aquatic Biodiversity Compliance Statment of the proposed development of a new WTW for Heidelberg has identified a number of short-comings as follows:

- Completeness of information presented: Certain important information which is gleaned from online databases should have been provided; and
- Manner in which mitigation measures are presented: It is questionable whether the recommended mitigation measures as articulated in the Enviro-EAP Compliance Statement will achieve 100% mitigation effect (i.e. ensure that the risks to the aquatic ecosystems will be eliminated).

Going forward. Enviro-EAP needs to expand on the information provided in the Compliance Statement by adding additional maps and recommending more detailed mitigation measures as recommended in this report. If this is done then EnviroSwift is satisfied with the level (i.e. Compliance Statement versus Aquatic Biodiversity Assessment) and scope of the assessment insofar as providing assurance to the authorities that no aquatic ecosystems are at risk as a result of the development of the WTW which is arguable the key objective of a Compliance Statement.

Prepared by:

Nick Steytler SACNASP Reg. no. 400029/02
EnviroSwift Western Cape
Cell 082-322 4074

References

Cape Farm Mapper. 2025. https://gis.elsenburg.com/apps/cfm/

Council for Scientific and Industrial Research. 2018 National Wetland Map 5 and Confidence Map [Vector] 2018. Available from the Biodiversity GIS website.

Department of Water Affairs and Forestry. 2008. Updated Manual for the Identification and Delineation of Wetlands and Riparian Areas, prepared by M. Rountree, A. L. Batchelor, J. MacKenzie and D. Hoare. Stream Flow Reduction Activities, Department of Water Affairs and Forestry, Pretoria, South Africa.

Enviro-EAP. 2025. Aquatic Biodiversity Impact Assessment. Clanwilliam Housing Development and WWTW Expansion on a Portion of Remainder of Erf 279, Clanwilliam. February, 2025.

Job, N. 2009. Application of the Department of Water Affairs and Forestry (DWAF) wetland delineation method to wetland soils of the Western Cape.

Kotze, D.C., Macfarlane, D. and Edwards, R. 2021 WET-EcoServices (Version 2): A technique for rapidly assessing ecosystem services supplied by wetlands and riparian areas. WRC Report No. 2737/1/21. July 2021.

Macfarlane, D.M. and Bredin, I.P. 2016. Buffer zone guidelines for drainage lines, wetlands and estuaries. Part 1: Technical Manual. WRC Report No (tbc), Water Research Commission, Pretoria.

Macfarlane, D.M. and Bredin, I.P. 2016. Buffer zone guidelines for drainage lines, wetlands and estuaries. Part 2: Practical Guide. WRC Report No (tbc), Water Research Commission, Pretoria.

Macfarlane, D.M. and Bredin, I.P. 2017. Buffer zone guidelines for rivers, wetlands and estuaries. Part 1: Technical Manual. WRC Report No. TT 715-1-17, Water Research Commission, Pretoria.

Nel, JL, Driver, A., Strydom W.F., Maherry, A., Petersen, C., Hill, L., Roux, D.J, Nienaber, S., Van Deventer, H., Swartz, E. & Smith-Adao, L.B. 2011a. Atlas of Freshwater Ecosystem Priority Areas in South Africa: Maps to support sustainable development of water resources. Water Research Commission Report No. TT 500/11, Water Research Commission, Pretoria, RSA.

Ollis, D.J., Snaddon, C.D., Job, N.M. and Mbona, N. 2013 Classification System for Wetlands and other Aquatic Ecosystems in South Africa. User Manual: Inland Systems. SANBI Biodiversity Series 22. South African National Biodiversity Institute, Pretoria.

WCBSP. 2023. Western Cape Biodiversity Spatial Plan. Department of Environmental Affairs and Development Planning. Cape Town.

APPENDIX A:
CV of the Specialist

Curriculum Vitae

of

NICHOLAS STEYTLER

Director – EnviroSwift Western Cape

CONTACT DETAILS	
Address	32 Rameron Road, Imhoffs Gift, Kommetjie 7975
Email	Nick@enviroswift.co.za
Cell	082-322 4074
PERSONAL INFO	
Full Names	Nicholas Sean Steytler
Date of Birth	28 March 1970
Nationality	South African
Languages	English, Afrikaans, isiZulu (fair)
Identity Number	7003285202088

ACADEMIC QUALIFICATIONS		
BSc	University of Natal (Pmb)	1990
BSc Honours (Zoology & Entomology) ***Cum Laude***	University of Natal (Pmb)	1991
MSc (Entomology)	University of Natal (Pmb)	1994

PUBLICATIONS

Steytler, NS and Samways, 1995. MJ. Biotope selection by adult male dragonflies (Odonata) at an artificial lake created for insect conservation in South Africa. Biological Conservation Volume 72 Issue 3, December 1995, Pages 381 – 386.

Samways, MJ and Steytler, NS. 1996. Dragonfly (Odonata) distribution patterns in urban and forest landscapes, and recommendations for riparian management. Biological Conservation Volume 78 Issue 3, December 1996, Pages 279 – 288.

MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS

Registered Environmental Scientist (Pr Sci Nat 400029/02)

Member of IAIA SA

FIELDS OF EXPERTISE	**Years experience**
Integrated Environmental Management	25 years +
Natural Resource Management Planning	25 years +
Freshwater Ecological Specialist Studies	5 years +

EMPLOYMENT HISTORY

2019 – present: EnviroSwift Western Cape. Director / owner

2007 – present: KHULA Environmental Consultants. Director / owner

2005 – 2009: DJ Environmental Consultants. Associate Consultant.

2000 – 2005: SRK Consulting, Cape Town, Environmental Department. Senior Environmental Scientist.

1996 – 2000: Institute of Natural Resources, Pietermaritzburg. Associate Researcher: Natural Resources Management Programme.
WORK EXPERIENCE (note IEM experience not listed below)
Freshwater ecological specialist studies:
Freshwater ecological impact assessment of the development of housing opportunities on Portion 22 of the Farm Koopmans Kloof No. 221, Kraaifontein, City of Cape Town (2025)
Freshwater ecological impact assessment to support a S24G Rectification Application for the development of a residential dwelling on Farm 1620 Stellenbosch, Western Cape (2025)
Freshwater ecological risk assessment and preparation of a Rehabilitation Plan for the establishment of a Construction Site Camp in a wetland on Erf 65266 Wynberg, City of Cape Town (2025)
Freshwater ecological impact assessment for the proposed residential development of Erf 534 Bantry Bay, City of Cape Town (2025)
Freshwater ecological impact assessment for the proposed residential development of Erf 2534 Yzerfontein, Western Cape (2025)
Freshwater screening study for the proposed redevelopment of Erf 3129 Oranjezicht, City of Cape Town (2025)
Freshwater screening study for the proposed agricultural expansion at Rio Largo Olive Farm (Farms 757 and 758), Scherpenheuwel, Worcester, Western Cape (2025)
Freshwater screening study for the proposed residential development of Remainder Erf 474 St. Helena Bay, Western Cape (2025)
Freshwater screening study for the proposed residential development of Erf 919 Constantia, City of Cape Town (2025)
Freshwater screening study for the proposed redevelopment of Erf 2762 Camps Bay, City of Cape Town (2025)
Freshwater screening study for the proposed expansion of a school at Erf 4929 Lekkerwater Road, Sunnydale, City of Cape Town (2025)
Freshwater ecological impact assessment for the proposed residential development of Erf 3368 Higgovale, City of Cape Town (2025)
Freshwater screening study for the proposed residential development of Erf 17678 Capri, City of Cape Town (2024)
Freshwater screening study for the proposed Eersteriver Station Development, Erven 18-21, 25-29 and 1072, Eersteriver, City of Cape Town (2024)
Freshwater ecological impact assessment as part of a NEMA Section 24G Rectification process for the unlawful expansion of an egg-laying poultry farm on Portion 128 of the Farm Stocklands and Oatlands No. 878, Currys Post, KwaZulu-Natal (2024)
Freshwater ecological impact assessment as part of a NEMA Section 24G Rectification process for the unlawful clearance of indigenous vegetation on Portion 48 of the Farm 708, Franskraal, Overstrand Municipality (2024)
Freshwater ecological impact assessment for the proposed single residential development of Portions 125 & 126 of Farm 599 Bettys Bay, Overstrand Municipality (2024)
Freshwater ecological impact assessment for the proposed development 4 residential dwellings and associated infrastructure on Portion 86 of the Farm Bosjesmans Valley No. 218, Worcester (2024)
Freshwater screening study for the proposed development of Erf 1847 Hout Bay, City of Cape Town (2024)
Freshwater screening study as part of a NEMA Section 24G Rectification process for the proposed single residential development of Erf 5629 Bettys Bay, Overstrand Municipality (2024)
Freshwater ecological impact assessment for the proposed development of Erf 8384 Hout Bay, City of Cape Town (2024)
Freshwater screening study for the proposed development of Erf 4502 Hout Bay, City of Cape Town (2024)
Freshwater screening study for the proposed subdivision of Erf 4476 in Waterfall Lane, Hout Bay, City of Cape Town (2024)
Freshwater ecological impact assessment as part of a NEMA Section 24G Rectification process for the unlawful development of tourism accommodation facilities at the Portion 1 of Farm 866, Bot River, Theewaterskloof Municipality (2024)
Freshwater screening study for the proposed development of Erf 1472 Hout Bay, City of Cape Town (2024)
Freshwater screening study for the proposed expansion of the Montana Seed Processing Facility, Joostenbergvlakte, City of Cape Town (2024)
Freshwater screening study for the German School, Kloof Neck, City of Cape Town (2024)
Freshwater screening study for the proposed telecommunications mast on Portion 6 of the Farm Harkerville No 423, Knysna Road, Plettenberg Bay (2024)
Freshwater screening study for the proposed residential development of Erven 3233 and 3234 Hout Bay, City of Cape Town (2024)
Freshwater screening study for the proposed residential development of Portion 3 of Farm 1643, Franschhoek, Drakenstein Municipality (2024)
Freshwater screening study for the proposed new in-stream dam on the Remaining extent of Farm Sevilla No. 135, Clanwilliam (2024)
Freshwater screening study for the proposed Morning Star affordable housing scheme, Durbanville, City of Cape Town (2024)
Freshwater screening study for the proposed temporary staging facility for the proposed Wynberg IRT bus depot, City of Cape Town (2024)
Freshwater screening study for the proposed subdivision of Erf 4795 Noordhoek, City of Cape Town (2024)

Freshwater screening study for the proposed single residential development of Erf 88844 Clovelly, City of Cape Town (2023)
Wetland delineation at the propsoed Eagles Rest Private Nature Reserve, Cape Point (2024)
Freshwater ecological impact assessment for external services for Welmoed Urban Node, Stellenbosch (2024)
Freshwater screening study for proposed solar PV facilities on the Remainder of Portion 5 of the Farm Rietvallei No. 167, Montagu (2023)
Amendments to freshwater specialist reports submitted in support of the applications for environmental approval for the Calcutta Cemetery, Farm 29 Stellenbosch (2023)
Freshwater screening study for the proposed development of Erf 325 Atlantis, City of Cape Town (2023)
Freshwater screening study for the proposed development of solar PV facilities on Farms 788-6 and 792-RE, Philippi, City of Cape Town (2023)
Freshwater screening study for the Proposed development of solar PV facilities on Erven 551 and 553, Schaapkraal, City of Cape Town (2023)
Freshwater ecological impact assessment for the proposed expansion of the Rusty Gate Mountain Retreat, Greyton (2023)
Freshwater screening study of the proposed redevelopment of portions of Stikland Hospital, Erf 6300 Stikland, Bellville (2023)
Freshwater ecological specialist review & assessment for the proposed amendment to the scope of the authorised extension of Erica Drive, Belhar, City of Cape Town (2023)
Freshwater Screening study for the proposed telecommunications base station on Portion 20 of the Farm Matroosberge No. 57, De Doorns (2023)
Freshwater ecological impact assessment for the proposed subdivision of Erf 10546 Hout Bay (2023)
Freshwater screening study for the proposed expansion of Louwville township, Vredenburg (2023)
Freshwater ecological impact assessment for the residential development of Erf 178092 Newlands, City of Cape Town (2023)
Freshwater screening study for Erf 2068 Somerset West, City of Cape Town (2023)
Freshwater screening study for Portion 3 of Farm 1025 Wemmershoek, Stellenbosch Municipality (2023)
Freshwater ecological impact assessment for a new Wastewater Treatment Works for Matjiesfontein, Laingsburg Municipality (2023)
Freshwater ecological impact assessment for the development of tourism accommodation facilities at the Farm Hemelrand, Hemel en Aarde Valley, Overstrand Municipality (2023)
Freshwater screening study for residential development at Oude Bosch, Hermanus Lagoon, Overstrand Municipality (2022)
Freshwater ecological impact assessment for a proposed shopping centre at Erf 666 Hout Bay, City of Cape Town (2022)
Freshwater screening study for the proposed formalisation of the Valhalla Park informal settlement, Cape Flats, City of Cape Town (2022)
Freshwater screening study for a proposed telecommunications mast, Overhex, Breede Valley Winelands Municipality (2022)
Freshwater ecological impact assessment for the proposed expansion of the Leopard Rock residential estate, Onrusrivier, Overstrand Municipality (2022)
Freshwater screening study for the proposed low cost housing development at Wolwerivier, City of Cape Town (2022)
Freshwater ecological impact assessment for the proposed low cost housing development of Erf 148 Philadelphia, City of Cape Town (2022)
Freshwater screening study of Erf 10932 Constantia, City of Cape Town (2022)
Freshwater screening study of Erf 49 Faure, City of Cape Town (2021)
Freshwater screening study for a proposed concrete factory on the Remainder of the Farm Bultfontyn 128, near Middelburg in the Eastern Cape (2021)
Freshwater ecological impact assessment for the proposed expansion of vineyards at Mountain Rose Farm, Hemel en Aarde Valley, Overstrand Municipality (2022)
Freshwater ecological impact assessment for unlawful agricultural expansion at Plennegy Farm, Oudtshoorn, Western Cape (2021)
Freshwater screening study for the development of erven 41 and 59, Knole Park, City of Cape Town (2021)
Freshwater ecological impact assessment for proposed truck stop on Portion of Erf 10229, Beaufort West, Western Cape (2021)
Freshwater screening study for the proposed redevelopment of the Mowbray Golf Course, Pinelands, City of Cape Town (2021)
Provision of rehabilitation specifications for the unlawful excavation of a trench in a non-perennial drainage line at the Farm Vergelegen, Robertson, Western Cape (2021)
Freshwater ecological impact assessment for unlawful agricultural expansion at Samber Farms, Riversdale, Western Cape (2021)
Freshwater ecological impact assessment for proposed expansion of an in-stream irrigation dam at Farm Hartebeest Kuil, George, Western Cape (2021)
Freshwater screening study for the proposed residential development of Erf 208 Bishopscourt, City of Cape Town (2021)
Freshwater screening study for the proposed agricultural processing facility, Maqinqi communal area, Port St. Johns Municipality, Eastern Cape (2021)

Freshwater ecological impact assessment for the proposed agricultural expansion at the Farm Vergelegen, Robertson, Western Cape (2021)
Freshwater ecological impact assessment for a proposed residential development in Plattekloof, City of Cape Town (2021)
Freshwater ecological screening study for the proposed sewerage pipeline for Schulz Vlei development, Philippi, City of Cape Town (2021)
Freshwater ecological impact assessment for the proposed development of an agro-industrial facility, Wemmershoek, Western Cape (2021)
Freshwater ecological screening study for a proposed filling station in Eerste River, City of Cape Town (2020)
Freshwater ecological impact assessment for an unlawfully constructed tourist accommodation facility, Tulbagh, Western Cape (2020)
Freshwater ecological screening study and risk assessment for additions and alterations to an existing residential dwelling, Breede River, Western Cape (2020)
Freshwater ecological screening study for a proposed truck depot and filling station, Paarl, Western Cape (2020)
Freshwater ecological screening study for a proposed phosphate mine, Saldanha, Western Cape (2020)
Freshwater ecological screening study for a single residential development at Oppi Berg, Ceres, Western Cape (2020)
Freshwater ecological screening study for a proposed industrial area expansion, Bredasdorp, Overberg, Western Cape (2020)
Freshwater ecological impact assessment for proposed Canola plant at Erf 15711 Wellington, Drakenstein Municipality (2020)
Freshwater ecological impact assessment for single residential development of Ptn 13 of Farm 563 Kleinmond (2020)
Freshwater ecological impact assessment for new IRT bus depot, Wynberg, City of Cape Town (2019)
Freshwater ecological screening study for Blackheath Printers, Blackheath, City of Cape Town (2019)
Freshwater ecological screening study for La Motte residential extension, St. Helena Bay (2019)
Freshwater ecological impact assessment for Vloedbos Resort, Overberg (2019)
Freshwater ecological screening study for Erf 3660 Hout Bay, City of Cape Town (2019)
Freshwater ecological screening study for Erf 2145 Constantia, City of Cape Town (2019)
Freshwater ecological impact assessment for low-cost housing development in Khayelitsha (2019)
Freshwater ecological impact assessment for Kommetjie Vineyards Estate, City of Cape Town (2018)
Freshwater ecological screening study for Remainder Erf 177887 Ottery, City of Cape Town (2018)

Environmental Planning and Natural Resources Management:
Preparation of an Invasive Alien Plant Clearing Plan for Erf 6289 Hout Bay, City of Cape Town (2021)
Preparation of an Invasive Alien Plant Clearing Plan for Shamballah Tea House, Cape Point, City of Cape Town (2019)
Preparation of an Invasive Alien Plant Clearing Plan for Imhoff Farm, Southern Peninsula, City of Cape Town (2018)
Preparation of a River Maintenance Management Plan for the Jakkals River, Elgin, Theewaterskloof Municipality (2018)
Preparation of a River Maintenance Management Plan for wetlands associated with the Bottelary River, Hazendal Wine Farm, Stellenbosch (2017)
Preparation of an Alien Plant Clearing Plan for the Farm Wildschutsbrand, Cape Point (2017).
Preparation of an Alien Plant Clearing Plan for Lalapanzi Farm, Cape Point (2017).
Preparation of a River Maintenance Management Plan for the Dawidskraal River, Bettys Bay, Overstrand (2016)
Preparation of a Site Rehabilitation and Management Plan for wetlands at Kraaifontein Shooting club, Northern Cape Metro (2015)
Preparation of a Wetland Maintenance and Management Plan for De Goede Hoop Estate, Noordhoek, South Peninsula (2014)
Application for Off-Road Vehicle Regulations licence for boat launching facility, Oceana Power Boat Club slipway, V&A Waterfront (2014)
Preparation of a Maintenance Management Plan for the Silvermine River, Clovelly Country Club, South Peninsula (2014)
Preparation of a Maintenance Management Plan for the rehabilitation and maintenance of an unnamed stream and associated infrastructure, Klein Constantia Winefarm, Cape Metropole (2014)
Environmental Screening for the proposed redevelopment of the Tygerberg Hospital, Northern Cape Metropole (2014)
Establishment of a Permanent Coastal Development Setback Line for the V&A Waterfront, City of Cape Town (2014)
Preparation of a Maintenance Management Plan for the ongoing maintenance of the access road to the West Coast Rock Lobster holding facility, Witsand Island, Scarborough, City of Cape Town (2013)
Preparation of a Maintenance Management Plan for the Kromboom River, Erf 117459 Lansdowne, Cape Metropole (2013)
Preparation of a Rehabilitation Plan for the remediation of unlawful infilling of a wetland at Lalapanzi Farm, Cape Point (2012)
Preparation of a Rehabilitation Plan for the remediation of unlawful construction of a parking area at Erf 935 Noordhoek Farm Village, City of Cape Town (2012)
Preparation of a rehabilitation plan for the closure of the Retreat Filling Station, City of Cape Town (2012)
Khayeltisha Wetlands Park – Park Delineation and Management Review, City of Cape Town (2010)
Preparation of the Coast & Estuaries Theme for the 1st review of Eastern Cape State of the Environment Report (2009)
Preparation of 2010 FIFA World Cup Greening Business Plan for Polokwane, Limpopo Province (2008)

Preparation of 2010 FIFA World Cup Greening Business Plan for Rustenburg, North West Province (2008)
Revision of the Table Mountain National Park Conservation Development Framework, City of Cape Town (2006)
Comparative Evaluation of alternative venues for the 2010 FIFA World Cup Stadium, City of Cape Town (2006)
Preparation of a Strategic Management Framework for the Kogelberg Biosphere Reserve, Overberg (2005 – 2006)
Preparation of concept document and proposal to undertake a SADC regional market survey of the indigenous fibre trade, SADC Region (2006)
Strategic Planning of Cemeteries in the Drakenstein Municipality (2006)
Environmental assessment of overnight sites for the Hoerikwaggo Trails, Table Mountain National Park, Western Cape (2005)
Preparation of the Year 1 State of the Environment Report for the Western Cape (2005)
Preparation of a Water Resources Management Strategy for Mozambique (2004)
Due Diligence Study for the proposed Mozaq Limitada Prawn Farm, Mozambique (2003)
Preparation of the Culemborg Development Framework, City of Cape Town (2001)
Restoration Planning of the Bokramspruit River, Kommetjie, City of Cape Town (2001)
Management and Maintenance Planning of the Dwars River, Ceres (2001)
Preparation of the Garden Route Spatial Development Framework, Southern Cape (2001)
Strategic Planning of the information needs of a Medicinal Plants Network in the SADC region (1999)
Research to determine potential commercial products from the Wild - Medicinal Plants component, South Africa (1999)
Economic Evaluation of the Cultivation of Nine Species of Medicinal Plants Indigenous to South Africa (1998)
Faunal specialist assessment for the proposed N2 by-pass, Natal Drakensberg, KwaZulu-Natal (1997).
Freshwater specialist assessment for the proposed construction of a bridge over the Msunduzi River, Voortrekker Highschool, Pietermaritzburg (1997)
Strategic Planning of a proposed community based indigenous forest management project, Eastern Cape (1998)
Preparation of a decision support manual for community-based urban riparian systems management (RIPARI-MAN) (1998)
Preparation of an Integrated Catchment Management Plan for the Msunduzi River Catchment, Pietermaritzburg (1997)
Development of Flood Response Strategies for the Msunduzi River Catchment, Pietermaritzburg (1997)
Evaluating community-based wildlife management projects in the SADC region as part of the international project by IIED / IUCN called “Evaluating Eden” (1996)