

EnviroSwift

Where nature meets development



Aquatic Biodiversity Compliance Statement:

Proposed housing development, Erven 182 & 184 and Nuwerus, Matzikamma Municipality, Northern Cape

Prepared for:

Enviro-EAP Environmental Consultants

Prepared by:

Nick Steytler

SACNASP Reg. no. 400029/02

Date: 18/11/25

DISCLAIMER

EnviroSwift Western Cape (WC) has exercised all due care in the reviewing of all available information. EnviroSwift WC does not accept responsibility for any errors or omissions in the assessment and therefore does not accept any consequential liability arising from commercial decisions made, which are based on the information contained in this report. Opinions presented in this report apply to site conditions applicable at time of assessment and those conditions which are reasonably foreseeable.

SPECIALIST DETAILS AND EXPERIENCE

Nick Steytler (Pr.Sci.Nat. 400029)

Nick Steytler is a registered Professional Natural Scientist (Pr.Sci.Nat) with the South African Council for Natural Scientific Professions (SACNASP) with over 25 years' experience in the field of environmental management. He holds a Masters of Science (MSc) degree in the field of Entomology (University of KwaZulu-Natal, Pietermaritzburg campus). His employment record includes several years with the Institute of Natural Resources in KwaZulu-Natal where he worked within their Natural Resource Management Programme and with SRK Consulting in Cape Town where he worked as an Environmental Scientist in the field of environmental management (i.e. undertaking Environmental Impact Assessment [EIA] and the like). After leaving SRK, Nick founded KHULA Environmental Consultants and holds the position of Director. In developing his expertise as a freshwater specialist, he initially worked in the capacity of an associate to EnviroSwift Western Cape (WC) but has since taken over the company and now undertakes all wetland specialist work in the Western, Southern, Eastern and Northern Cape. Nick's CV is attached as Appendix A.

SPECIALIST DECLARATION

I, Nick Steytler, as the appointed independent specialist, in terms of the 2014 EIA Regulations (as amended), hereby declare that:

I act as the independent specialist in this application;

I perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;

I 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, 2014 (as amended) and any specific environmental management Act;

I declare that there are no circumstances that may compromise my objectivity in performing such work;

I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;

I will comply with the Act, Regulations and all other applicable legislation;

I have no, and will not engage in, conflicting interests in the undertaking of the activity; I have no vested interest in the proposed activity proceeding;

I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;

I 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;

I 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;

All the particulars furnished by me in this specialist input/study are true and correct; and
I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the specialist:



Name of Specialist: Nick Steytler

Date: 18/11/2025

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APPENDIX A – CV of the Specialist

1. Introduction and Background

The Matzikamma Municipality proposes to develop 91 residential units on Erven 182 and 184 (known as the “Nieuwe Rust” housing project), Nuwerus, Northern Cape (see Figure 1 for site location map). The proposed development triggers the requirement for environmental authorisation in terms of the NEMA EIA Regulations (2014, as amended). Nicolaas Hanekom of Enviro-EAP Environmental Consultants (“Enviro-EAP”) has been appointed by the developer as the Environmental Assessment Practitioner (EAP). Enviro-EAP has generated a Screening Tool Report for the site which indicates a LOW sensitivity for the Aquatic Biodiversity theme. Accordingly, a freshwater specialist is required to verify the sensitivity rating. Depending on the outcome, either an Aquatic Biodiversity Compliance Statement (in the event that the site is confirmed to have a LOW sensitivity) or an Aquatic Biodiversity Assessment compliant with the gazetted protocol for such assessments (in the event that the sensitivity is found to be HIGH).

As such Enviro-EAP requires a determination regarding the aquatic biodiversity sensitivity of the site and also whether a water use authorisation is required in terms of the National Water Act, Act 36 of 1998 (NWA), given the fact that the site is located within the NWA regulated area of mapped drainage lines. If any drainage line, river or wetland is determined to be at risk of being impacted by the proposed development then either a General Authorisation (GA) or a full Water Use License (WUL) is required in terms of the NWA, in addition to the environmental authorisation in terms of the NEMA EIA Regulations (2014 as amended).

Enviro-EAP has accordingly appointed EnviroSwift Western Cape (“EnviroSwift”) to undertake a site investigation to confirm the aquatic biodiversity sensitivity of the site and determine whether the site is located within the NWA regulated area of any watercourses and whether the affected watercourses are at risk being impacted. If so, an overview of the requirements of any applicable environmental authorisations is required.

In order to provide this input EnviroSwift conducted a site visit on 26 September 2025 and also undertook a desktop review of available information including the National Geospatial Information (NGI) Rivers database (available on Cape Farm Mapper), the National Wetlands Map (CSIR, 2018), NFEPA wetlands database (Nel et al., 2011) and the Western Cape Biodiversity Spatial Plan (WCBSP, 2023). The route followed by EnviroSwift during the site visit is shown in Figure 1.



Figure 1: Location of the proposed site indicated as a yellow polygon. Area A lies to the east and Area B lies to the west. The blue line indicates the route taken by EnviroSwift in verifying the aquatic biodiversity assessment of the site.

Brief description of the proposed development

The Nieuwe Rust Housing project on Erf 182 and Erf 184 Nuwerus comprises the following:

- Area A of ± 0.92 ha extent: 31 single residential units
- Area B of ± 2.52 ha extent: 60 single residential units.

Each residential unit will have a footprint of 10m x 15m = ± 150 m².

Associated services will be provided in the following ways:

- **Potable water:** Portions A & B will require new internal reticulation networks, which will be 90mm diameter uPVC Class 12 pipes and will connect to the existing water mains in Olyf Street (Portion A) and Arcarcia Street (Portion B). Valves and hydrants will be provided at suitable positions.
- **Sewage handling and treatment:** The internal network will be 160 mm diameter class 34 uPVC pipes with 110 mm diameter erf connections. Raw effluent will be discharged into the municipal WWTW which has sufficient capacity to treat the effluent.
- **Stormwater:** Stormwater from Portion A and B will be collected and dispense of via a new piped system onto the adjacent vacant areas.
- **Roads:** The new roads for Portions A and B will connect to the existing Olyf Street and Arcarcia Street respectively. The new internal roads will consist of a combination of premix and paved surfaces and will be 10m and 8 m wide, but not longer than 1km.

2. Assumptions, Limitations and Methodology

The following limitations apply to this screening-level study:

- A single site assessment was conducted on 26 September 2025 (i.e. at the end of the wet season). This is the ideal time of the year to observe wetland and drainage line hydrology. Accordingly, the timing of the site investigation poses no limitations considering the primary aim of the study is to confirm the presence/absence of any watercourses on the site.
- During the site assessment the proposed site and its immediate surrounds was searched for signs of natural drainage, elevated levels of soil saturation and aquatic habitat (primarily in the form of the presence of hydrophytic vegetation). Aquatic habitat in the greater area was identified based on the available online databases, viz-a-viz the National Wetlands Map Version 5 (CSIR, 2018), the NFEPA wetlands database (Nel *et. al.*, 2011) and the NGI Rivers database (available on Cape Farm Mapper, 2025).
- The study area is considered a relatively straightforward case as the proposed site (Erfen 182 & 184) is undeveloped, naturally vegetated with minimal alien invasive plant encroachment. Naturally occurring hydrophytic vegetation on the site and/or the presence of naturally formed drainage channels would indicate the presence of a watercourse on the site.
- The outer temporary/seasonal boundary of any wetlands and the centre-line of non-perennial drainage lines have been delineated using a Garmin GPS which has an error factor of up to 3m.
- None of the above-mentioned assumptions and limitations are considered to have any effect on the findings of the study.

3. Legal Context

3.1 The National Water Act, Act 36 of 1998

In terms Section 21 of the NWA “water use” is defined broadly and includes taking and storing water, activities which reduce stream flow, waste discharges and disposals, controlled activities (activities which impact detrimentally on a water resource), altering a watercourse, removing water found underground for certain purposes, and recreation. In general, a water use must be licensed unless it is listed in Schedule I, is an existing lawful use, is permissible under a General Authorisation (GA), or if the competent authority waives the need for a licence.

Of particular relevance to this study are the following Section 21 water uses:

- Section 21 (c): Impeding or diverting the flow in a watercourse; and
- Section 21 (i): Altering the bed, banks, course or characteristics of a watercourse.

The NWA makes allowance for a regulated area around all watercourses within which the risk of Section 21 (c) and (i) activities must be assessed. The stipulated regulated areas include the area within 500m of the boundary of wetland, and the area within 100m or the 1:100 year flood-line (whichever is the greater distance) of a river, stream or drainage line. The following is applicable for any development within the regulated zone:

- Should a freshwater ecologist consider the proposed development to be of zero risk to freshwater resources then a letter may be provided to this effect and the requirement for a Water Use Authorisation (WUA) would be waived as the development would not constitute any Section 21 c and/or Section 21 i activities (W. Roets, *pers. comm.*).
- In all other cases, a risk assessment in terms of the revised General Authorisation (GA) for 21(c) and (i) water uses (Notice Number 4167 of the Government Gazette 49833 dated 8 December 2023) must be undertaken to determine the quantum of risk posed to the watercourse by the proposed development.
- Should the development pose a LOW risk, registration of the water use under the GA would be required.
- Should the development pose a MEDIUM risk, application for a Water Use License (WUL) would be required.
- HIGH risk developments also require a WUL but are not readily approved.

The Department of Water & Sanitation (DWS) holds competency in terms of the NWA and as such either authorises or rejects water use authorisations. The DWS exercises a no net loss of wetlands policy. Accordingly, should a development result in loss of wetland habitat then there would be a requirement for offsetting wetland loss. Offsets could either be in the form of rehabilitation and protection in perpetuity of any remaining on-site wetland habitat or purchase, rehabilitation and protection of an off-site wetland of similar type in a similar ecological context.

3.2 The National Environmental Management Act (NEMA) and the EIA Regulations

In terms of the National Environmental Management Act (NEMA) Environmental Impact Assessment (EIA) Regulations (2014, as amended), the following activities which relate to urban developments in close proximity to watercourses require prior environmental authorisation:

- Activity 12 of Listing Notice 1: The development of structures or infrastructure with a footprint that exceeds 100 m² within 32 m of a watercourse if in a rural area.
- Activity 19 of Listing Notice 1: Excavating or depositing 10m³ or more of any material within a watercourse; and
- Various activities in Listing Notice 3 due to the geographic location of the site.

In all of the above cases a Basic Assessment process should be undertaken. These processes would typically require a detailed level of aquatic biodiversity specialist input. The required level of specialist input is determined at the outset of an EIA process by applying the National Web-based Screening Tool. For all developments that trigger the requirement for prior environmental authorisation and for which, as a result of the application of the national web-based Environmental Screening Tool, have been determined to be associated with a VERY HIGH sensitivity for the aquatic biodiversity theme, the gazetted Protocol for specialist Aquatic Biodiversity Assessment must be complied with. This protocol prescribes the scope of the assessment and is particularly exhaustive in its requirements. However, if following groundtruthing by a freshwater ecologist the site is found to have a LOW aquatic biodiversity sensitivity then a specialist-prepared Aquatic Biodiversity Compliance Statement is required. If the site is found to have a zero aquatic biodiversity sensitivity then the findings can inform the Site Sensitivity Verification study and be used to motivate that no Compliance Statement is required.

4. Regional freshwater ecological context

The proposed site is situated within the Western Coastal Belt Ecoregion, within the Breede-Olifants Water Management Area (WMA), the Knersvlake sub-WMA and the E33E quaternary catchment (NFEPA, 2011 and Kleynhans et al, 2005).

According to the NGI Rivers database (available from Cape Farm Mapper, 2025) a non-perennial drainage line originates in Area A and then runs in a north-easterly direction (see Figure 2). According to the NFEPA database (Nel *et al.*, 2011) and the NWM5 (CSIR, 2018) there are no natural wetlands within 500m of either Area A or Area B. The area to the north-east of the proposed development and within 500m indicated as comprising artificial wetlands are in fact the ponds associated with the municipal WWTW.

The WCBSP (2023) was also consulted to determine whether the site or any nearby land is identified as having aquatic biodiversity conservation significance. According to the WCBSP, the northern part of Area A and continuing offsite in the direction of the non-perennial drainage line mapped in the NGI Rivers database to originate in Area A, comprises an Aquatic Ecological Support Area (ESA)1. There are no other areas of aquatic biodiversity conservation significance that are at risk of being impacted. ESAs are areas that are considered not important for achieving biodiversity conservation targets but play an important role in supporting Protected Areas (PAs) or Critical Biodiversity Areas (CBAs) and are often vital for delivering ecosystem services. The land management objective for ESA1 sites is to maintain in a functional, near-natural state. Some habitat loss is acceptable provided the underlying biodiversity objectives and ecological functioning are not compromised.

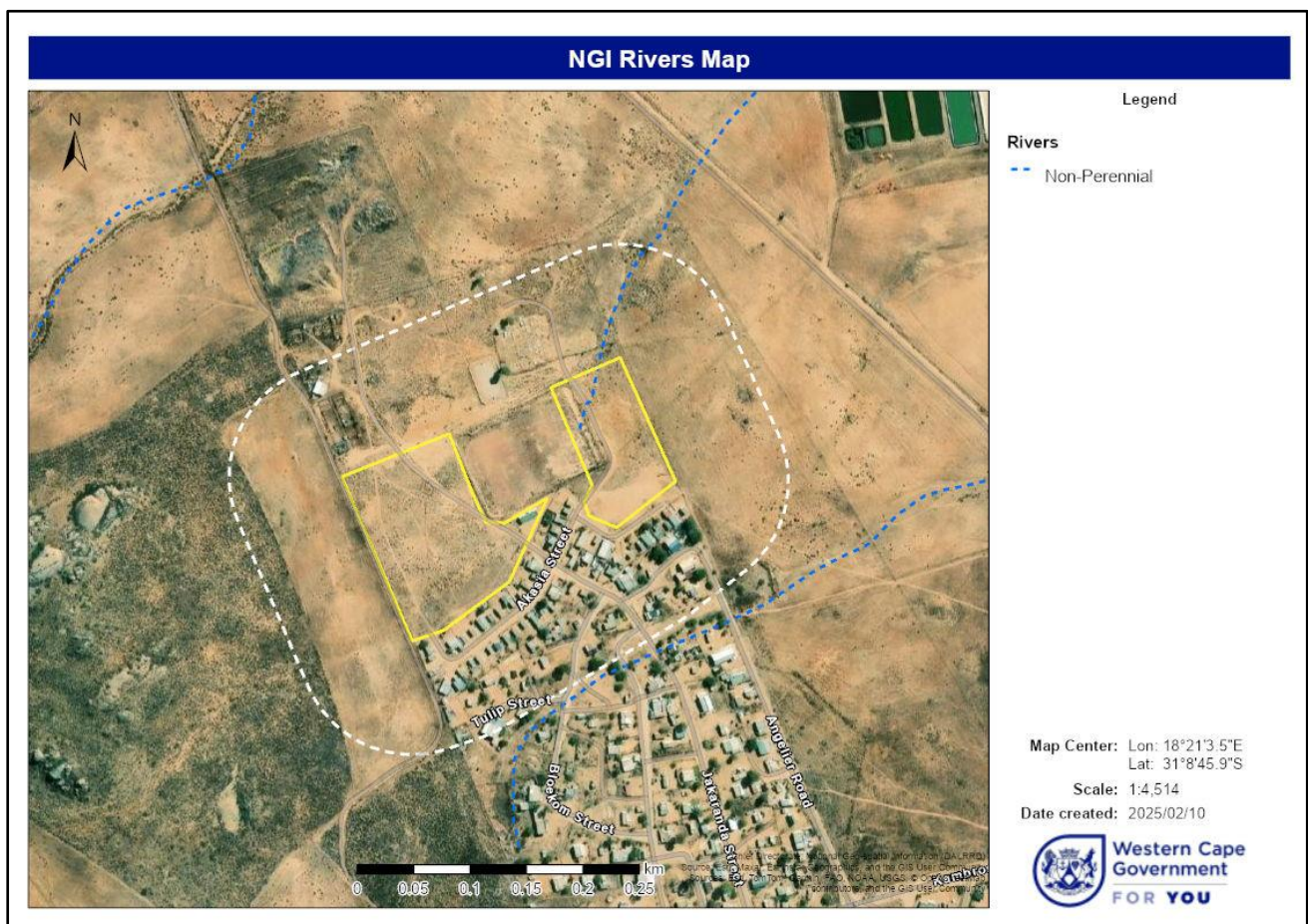


Figure 2: NGI Rivers Map (available on Cape Farm Mapper, 2025). The yellow polygons indicate the proposed site and the white stippled circle indicates the NWA regulated area for drainage lines (i.e. 100m).

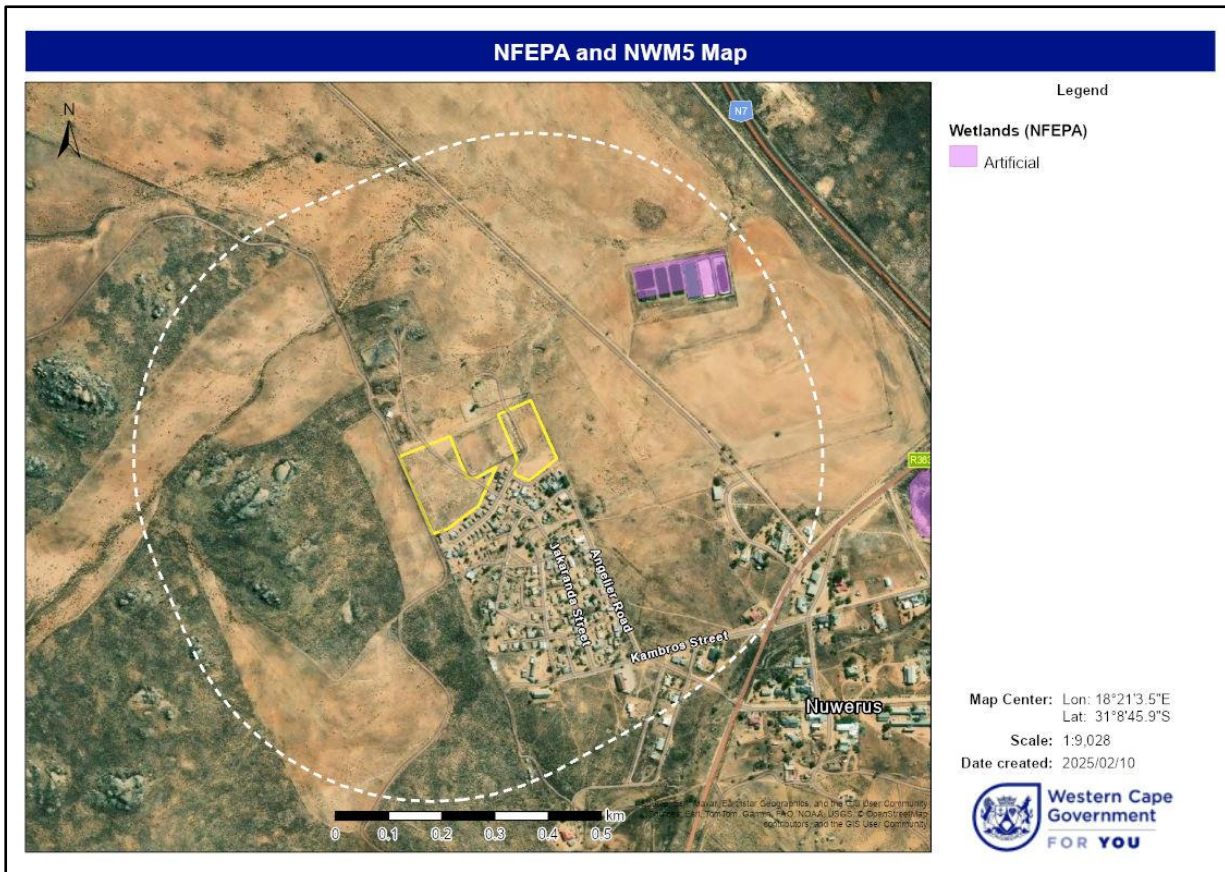


Figure 3: NFEPA (Nel *et al.*, 2011) and NWM5 (CSIR, 2018) showing no natural wetlands within the 500m regulated area for wetlands (indicated by the white stippled line).

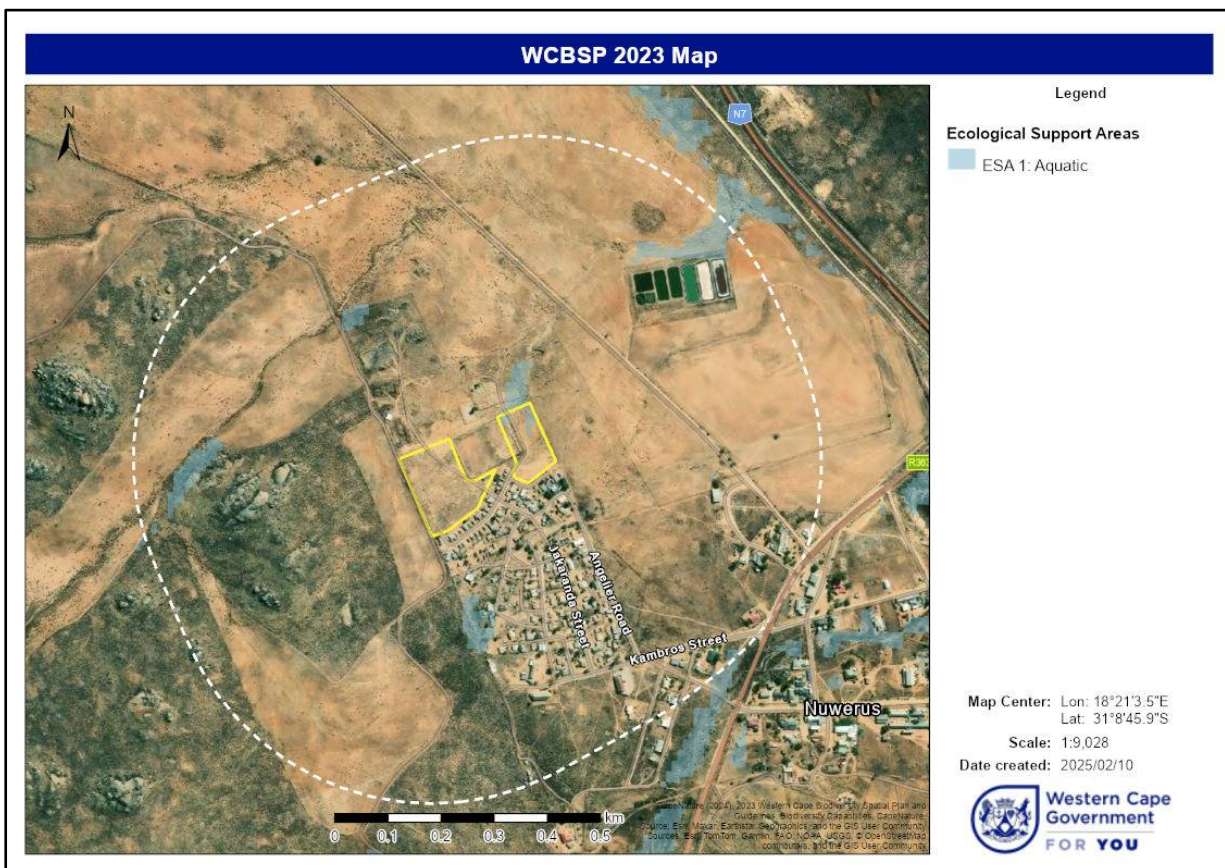


Figure 4: WCBS 2023 Map (available from Cape Farm Mapper) showing that a small portion of the site and the area immediately downslope of the site to the north comprises an Aquatic ESA.

5. Site visit and Groundtruthing

EnviroSwift visited the site on 26 September 2025 in order to confirm whether any watercourses, as defined in terms of the NWA, are present within or immediately adjacent to the site. The site was surveyed thoroughly and the site showed a sparse cover of indigenous vegetation as is characteristic of the mapped indigenous vegetation types, Southern Namaqualand Quartzite Klipkoppe Shrubland and Namaqualand Heuweltjieveld. Alien invasive species were generally absent and the only exotic species encountered were gums and pines planted within the confines of the cemetery and other municipal facilities (see Figures 5, 6, 7 & 8).

In order to identify aquatic habitat on or near the site, the site was searched for the presence of hydrophytic vegetation and evidence of concentrated drainage (e.g. erosion gullies and areas of sediment deposition). An erosion gully indicating confined drainage running in an easterly direction between the sportsfield and the cemetery was clearly visible (see Figure 7). At the point the drainage line reaches the northern boundary of Area A the channel has been totally transformed as a result of recent excavations (see Figure 8) after which it briefly enters the eastern end of the cemetery before continuing in a north-easterly direction where the drainage line is largely untransformed (see Figure 9). Given that the drainage line passes by within 7m of the northern boundary of Area A and is downslope of Area A the drainage line is potentially at risk of being impacted by the proposed development.



Figure 5: View from within Area A looking northwards towards the cemetery which marks the northern boundary of Area A.



Figure 6: View from within the Area B looking in a south-westerly direction towards the existing residential area of Nuwerus which marks the southern boundary of the Area B.



Figure 7: Evidence of concentrated drainage between the sports field and the cemetery. Note the erosion gullies and sold waste deposits.



Figure 8: View of the northern edge of Area A immediately adjacent to the cemetery where the drainage channel shown in 7 ran before grading. The recent grading have eliminated any signs of concentrated drainage in this area.



Figure 9: The non-perennial drainage line as it appears downstream and to the north east of the cemetery. Note the reddish-brown grass (species unknown) which occurs within the channel.

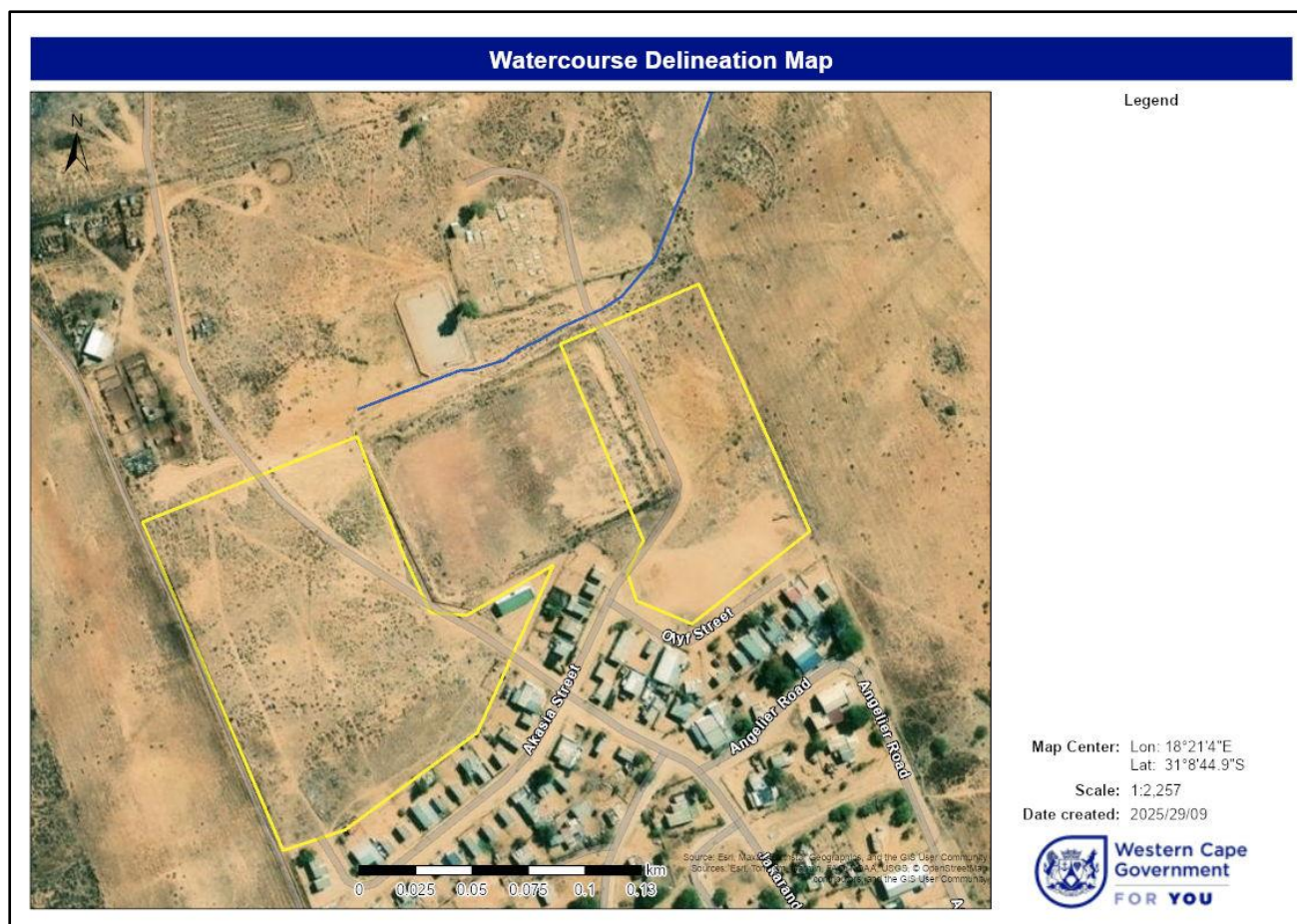


Figure 10: Watercourse Delineation Map. The blue line indicates the alignment of a non-perennial drainage line.

6. Key Findings & Recommendations

Available desktop resources map only a non-perennial drainage line within northern part of Area A. Groundtruthing confirmed the existence of this drainage line and given the proximity and location of the drainage line downslope of the proposed site, the drainage line is considered to be at risk of being impacted by the proposed development if the development proceeds as-is. No wetlands are mapped to occur within the site or the NWA regulated area for wetlands (500m).

The WCBSP (2023) indicates that the northern part of Area A in the vicinity of the mapped non-perennial drainage line comprises an ESA1. Given that no PAs or Aquatic CBAs are directly associated with the non-perennial drainage line, it is assumed that the designation of the watercourse as an ESA1 is due to the important ecological functions it performs for the downstream catchment in general (i.e. it does not appear to provide any ecological services for any downstream Aquatic CBAs or PAs).

While the Screening Tool indicates that the site has a LOW sensitivity from an Aquatic Biodiversity perspective, the mapped presence of a non-perennial drainage line within the site would suggest that the aquatic biodiversity sensitivity of the site is greater than LOW. Groundtruthing confirmed the lack of any signs of aquatic habitat or any form of ephemeral concentrated drainage on any part of the site (both Area A and Area B) and thus the sensitivity of the site itself is confirmed to be LOW. Groundtruthing did however reveal the presence of a non-perennial drainage line immediately beyond ($\pm 7m$) the northern boundary of Area A which is within the NWA regulated area for drainage lines. This fact, as well as the fact that the drainage line is hydrologically coupled with the site, means that the proposed development poses a quantum of risk to the drainage line if the impacts are not avoided, mitigated and/or managed.

The only aspect of the proposed development that could pose a risk to the drainage line is the discharge of stormwater from the site. The best practise approach of ensuring that post-development stormwater does not exceed pre-development flows would ordinarily eliminate this risk. However, having reviewed the Stormwater

Management Plan for the proposed development it is notable there is no provision for any on-site stormwater attenuation, presumably due to the low-cost nature of the development and the nature of the region's rainfall. The rainfall regime of the region can best be described as comprising very limited periods of relatively high rainfall which results in significant yet ephemeral flows in most of the region's drainage lines. As such, the option of discharging the development's equally ephemeral stormwater flows into the veld to the east of Area A is supported. The reason for this is that these ephemeral discharges would not cause significant flow regime impacts because during times of rainfall there would be significant sheet flow in the discharge area which would ameliorate the added flow regime impact of the development's stormwater discharge. Also, the region's ephemeral drainage lines are naturally exposed to highly variable flows (i.e. no flow for most of the year and then significant flow during storms). Such rainfall and stormwater regimes do increase the risk of erosion and the secondary impact of sedimentation that pose additional risks to the watercourse. Accordingly, it is EnviroSwift's opinion that the implementation of the following recommended impact management measures would ensure that the risk of erosion and sedimentation of the drainage line is eliminated:

- Ensure that the discharge point is adequately designed to minimise the force of the discharge stormwater through incorporation of energy dissipation structures;
- Spread the discharge point as far as possible to reduce concentration of the stormwater discharge;
- Address the upstream erosion as shown in Figure 7 through reshaping the watercourse and installing erosion protection structures as required;
- Ensure that the reshaping and erosion protection structures are installed during the dry summer season and are in place before the onset of the winter rains.

It is further recommended that all solid waste is removed from the drainage line prior to the onset of the first winter rains and also that a municipal worker is tasked with keeping the drainage line free of solid waste and unwanted debris into the future.

If all the above-listed measures are effectively implemented then the proposed development would not pose a risk to the drainage line or the downstream catchment and therefore would not require any Water Use Authorisation in terms of the NWA.

In terms of triggers for environmental authorisation in terms of the NEMA EIA Regulations (2014, as amended), a determination on whether the site is deemed urban or rural is required. If the site is determined to be rural then Activity 12 of Listing Notice 1 is triggered as the proposed development would result in structures and infrastructure with a footprint exceeding 100m² within 32m of a watercourse. This report meets the requirement of an Aquatic Biodiversity Compliance Statement insofar as it confirms the LOW sensitivity of the site from an Aquatic Biodiversity perspective and presents the methods that were used in determining the sensitivity, including groundtruthing by a SACNASP registered freshwater specialist.



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

REFERENCES

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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.

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

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Nel, J.L., 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.

NGI Rivers Database 2025 (available from: Cape Farm Mapper, 2025. <https://gis.elsenburg.com/apps/cfm/>)

WCBS, 2023 ((available from: Cape Farm Mapper, 2025. <https://gis.elsenburg.com/apps/cfm/>)

APPENDIX A:
CV of the Specialist

Curriculum Vitae

of

NICHOLAS STEYTLER

Director – EnviroSwift Western Cape

EnviroSwift
Where nature meets development



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) <i>Cum Laude</i>	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

	<u>Years experience</u>
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), Scherpenheuvel, 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, Sunnyside, 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, Franschoek, 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 proposed 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 Platteklouf, 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)

<i>Environmental Planning and Natural Resources Management:</i>
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)
Khayelitsha Wetlands Park – Park Delineation and Management Review, City of Cape Town (2010)
Preparation of the Coast & Estuaries Theme for the 1 st 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)