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Aquatic Biodiversity Compliance Statement:

Proposed development of low cost housing opportunities, Remainder of Erf 551, Darling, Swartland Municipality, Western Cape

Prepared for:

Enviro-EAP Environmental Consultants

Prepared by:

Nick Steytler

SACNASP Reg. no. 400029/02

Date: 02/08/26

DISCLAIMER

EnviroSwift Western Cape (EnviroSwift) has exercised all due care in the reviewing of all available information. EnviroSwift 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 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: 02/08/2026

Table of Contents

1.	Introduction and Background	1
2.	Assumptions, Limitations and Methodology	4
3.	Legal Context.....	4
3.1	The National Water Act, Act 36 of 1998	4
3.2	The National Environmental Management Act (NEMA) and the EIA Regulations	5
4.	Regional freshwater ecological context	5
5.	Site visit and Groundtruthing.....	7
6.	Preliminary Assessment of Risk	11
7.	Key Findings & Recommendations.....	13

APPENDIX A – CV of the Specialist

1. Introduction and Background

The Swartland Municipality proposes to develop low cost housing opportunities on Remainder of Erf 551, Darling, in the Western Cape (see Figure 1 for Site Location Plan). The proposed development requires environmental authorisation in terms of the NEMA EIA Regulations (2014, as amended). The Screening Tool indicated a LOW sensitivity for the Aquatic Biodiversity Theme, and should groundtruthing verify the sensitivity as LOW then a specialist-prepared Aquatic Biodiversity Compliance Statement is required. If, following groundtruthing the site is confirmed to have a VERY HIGH sensitivity then the application for environmental authorisation requires a detailed level of aquatic ecological assessment with the NEMA requirement being guided by the gazetted Protocol for Aquatic Biodiversity Assessment. Also, if aquatic ecosystems are determined to be at unavoidable risk of being impacted then the development would qualify for a Water Use Authorisation in terms of the National Water Act, Act 36 of 1998 (NWA). Accordingly, there would be the added requirement being for an assessment of the risk posed by the development on water resources as the outcome of the risk assessment would determine the level of Water Use Authorisation (either a General Authorisation or a full Water Use License).

Enviro-EAP Environmental Consultants (“Enviro-EAP”), the Environmental Assessment Practitioner (EAP) appointed by the Municipality to attend to the environmental authorisation requirements, has requested that EnviroSwift Western Cape (EnviroSwift) provide the required of aquatic ecological input including but not limited to:

- Verify the aquatic biodiversity sensitivity of the site and
- if confirmed to be LOW, prepare the required Aquatic Biodiversity Compliance Statement.
- If confirmed to be VERY HIGH then prepare the required Aquatic Biodiversity Assessment.

Given that no aquatic ecosystems were confirmed to be present on the proposed site (see Section 5), the site is verified to have a LOW sensitivity for the Aquatic Biodiversity theme. According an Aquatic Biodiversity Compliance Statement is required. The Compliance Statement must comply with the gazetted requirements of an Aquatic Biodiversity Statement by including the following:

- Contact details and curriculum vitae of the specialist including SACNASP registration number and field of expertise (see Appendix A);
- A signed statement of independence by the specialist (see preamble);
- A statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment (see Section 2);
- A description of the methodology used to undertake the site survey and prepare the compliance statement, including equipment and modelling used where relevant (see Section 2);
- Where required, proposed impact management actions and outcomes or any monitoring requirements for inclusion in the EMPr (see Section 7);
- A description of the assumptions made and any uncertainties or gaps in knowledge or data (see Section 3);
- The mean density of observations/ number of samples sites per unit area (see Section 3); and
- Any conditions to which the compliance statement is subjected (see Section 7).

In order to provide this input EnviroSwift conducted a site visit on 29 December 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).



Figure 1: Location of the proposed site indicated as a yellow polygon.

Brief description of the proposed development

Darling Housing phase 2 on Remainder of Erf 551 will consists of the following:

- 315 Residential Zone 2 erven (Single);
- 72 Residential Zone 2 erven (Walk-up);
- 1 Community Zone 1 (crèche) erf;
- 1 Community Zone 2 (church) erf;
- 1 Community Zone 1 (School) erf;
- 2 Open Space Zone 1 erven;
- 2 Authority Zone erf; and
- 1 Transport Zone 2 erf.

The proposed housing development will have a Total Development Footprint of approximately 12.1905ha. Figure 2 presents the Spatial Development Plan.

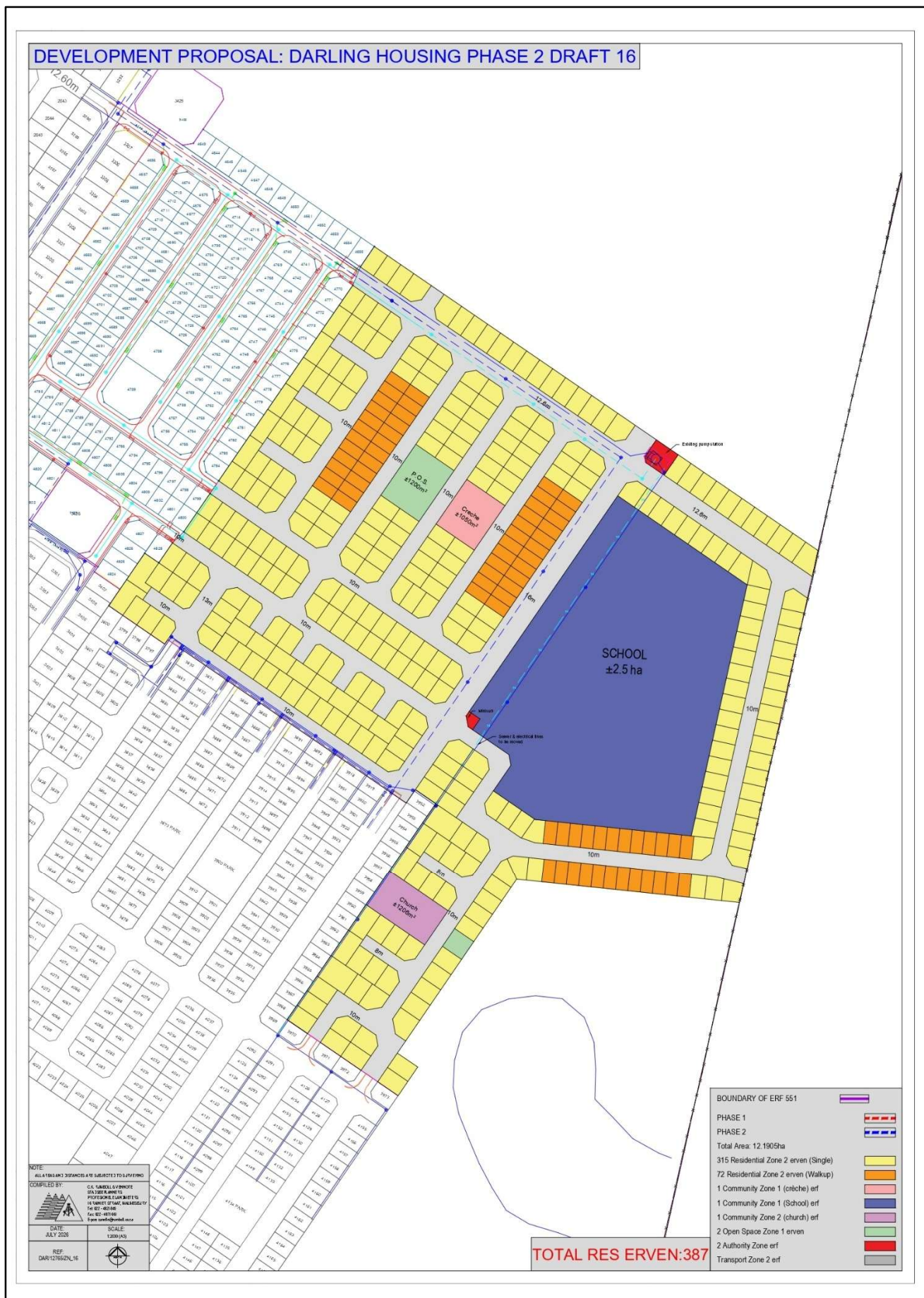


Figure 2: Spatial Development Plan of the proposed Low-cost Housing Development in Darling.

2. Assumptions, Limitations and Methodology

The following limitations apply to this screening-level study:

- A single site assessment was conducted on 29 December 2025 (i.e. in the middle of the dry season). This is not the ideal time of the year to observe wetland and drainage line hydrology. However, this is of no material implication for the present study as other indicators of the presence of aquatic habitat such as the presence of hydrophytic vegetation and wetland soil indicators can be used to confirm the presence of aquatic ecosystems.
- During the site assessment the proposed site and its immediate surrounds was searched for signs of natural drainage, soil saturation (redoximorphic signatures in the soil) and aquatic habitat (primarily in the form of the presence of hydrophytic vegetation). Aquatic habitat in the greater area (i.e. beyond the property boundary) 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, 2026) and, where possible on visual analysis.
- Where aquatic habitat is confirmed within the confines of the site boundary, this has been delineated by means of a hand-held Garmin Geographical Positioning System (GPS) as follows:
 - For wetlands, the outer edge of the wetland seasonal zone has been delineated; and
 - For rivers, the channel has been delineated as well as the outer edge of the riparian zone (if present) has been delineated.
- In determining the current extent of wetlands and riparian zones the methods used were limited to the upper 50cm of soil in accordance with the Updated Manual for Identification and Delineation of Wetland and Riparian Areas (Department of Water Affairs and Forestry - DWAF, 2008) and the Application of the DWAF (2008) Method to Wetland Soils of Western Cape (Job *et. al.* 2009);
- The study area is considered a relatively straightforward case as the site is undeveloped and covered by vegetation, mostly annual alien grasses and shrubs which suggests historic disturbance. While the naturally occurring vegetation on the site and surrounds comprises mostly secondary vegetation, wetland indicator species such as *Cynodon dactylon* (kweek) and *Juncus* sp. were still recognisable and, along with the presence of naturally-formed depressions, the presence of aquatic habitat could be identified, albeit not within the proposed site.

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 to negligible 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.

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: Development of any infrastructure exceeding 100m² within 32m of a watercourse, if outside of an urban 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 would 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 LOW 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 an aquatic ecologist the site is found to have a LOW aquatic biodiversity sensitivity then a specialist-prepared Aquatic Biodiversity Compliance Statement is required.

4. Regional freshwater ecological context

The proposed site is situated within the Southern Western Coastal Belt Ecoregion, within the Berg Water Management Area (WMA), the Lower Berg sub-WMA and the G10L quaternary catchment (NFEPA, 2011 and Kleynhans et al, 2005).

According to the NGI Rivers database (available from Cape Farm Mapper, 2026) there are no drainage lines within 500m of the proposed site (see Figure 3). According to the National Wetlands Map Version 5 (CSIR, 2018) there are no wetlands within the proposed site. A depression wetland is however mapped approximately 15m to the east of the southern portion of the proposed site. As such the mapped wetland lies within the NWA regulated area for wetlands (500m). The risk posed to this wetland by the development needs to be ascertained in order to determine whether a Water Use Authorisation is required in terms of the NWA and whether more detailed reporting and assessments of aquatic biodiversity is required. This is addressed in Section 6.

The NFEPA wetlands database (available on Cape Farm Mapper, 2026) was also consulted for completeness but this database merely confirmed the mapped wetland indicated on the NWM5 (see Figure 3).

The Western Cape Biodiversity Spatial Plan (WCBSP, 2023) was also consulted to determine whether the site or any nearby land is identified as having aquatic biodiversity conservation significance (see Figure 4). According to the WCBSP, most of the site and much of the vacant, undeveloped land to the north of the site is mapped as a Terrestrial Critical Biodiversity Area (CBA), presumably because the site contains remnant, albeit severely depauperate, Swartland Granite Renosterveld which is an Endangered terrestrial vegetation type (Government Gazette No. 47256, November 2022). The wetland system mapped to occur near the eastern boundary of the southern portion of the proposed site is mapped as an Aquatic CBA. There are no other areas of aquatic biodiversity significance within 500m of the site according to available online databases.

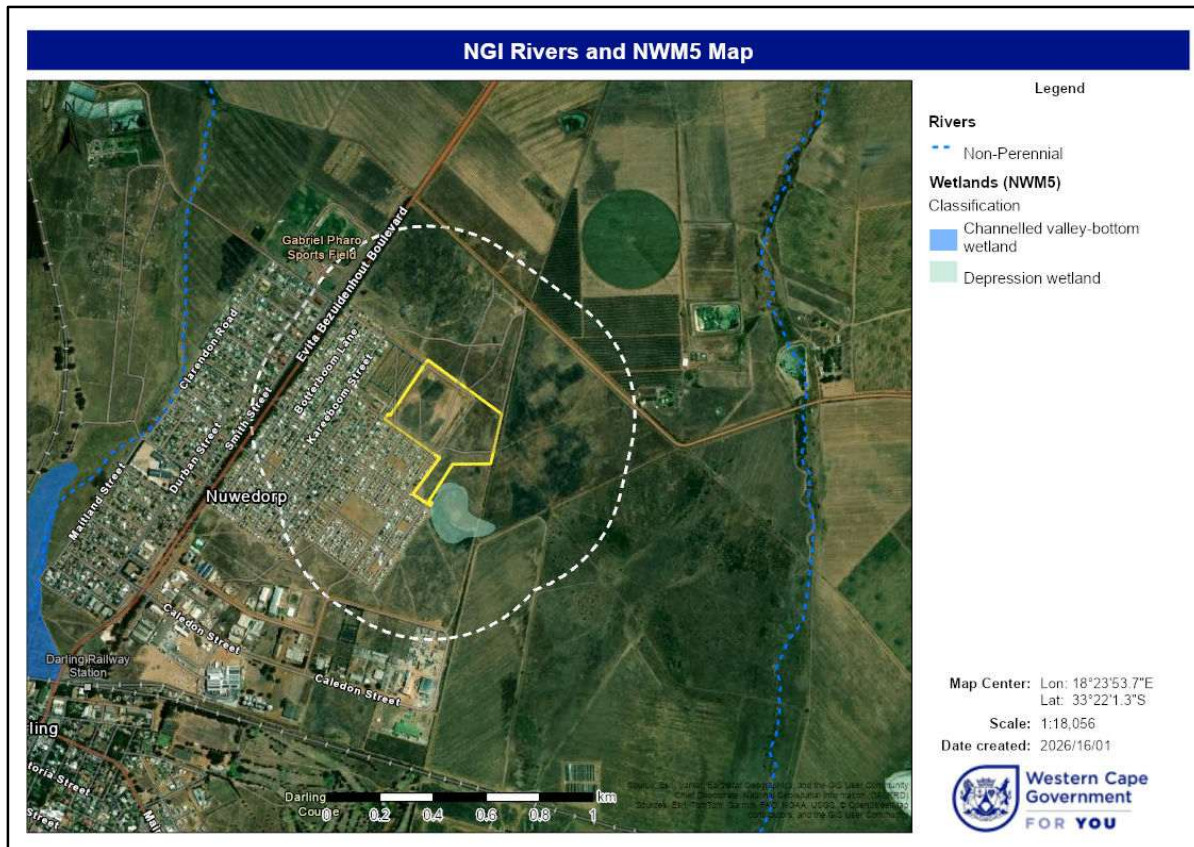


Figure 3: NGI Rivers and NWM5 Map (available on Cape Farm Mapper, 2026). The yellow polygon indicates the proposed site and the white stippled circle indicates the NWA regulated area for wetlands (i.e. 500m from the site boundary).

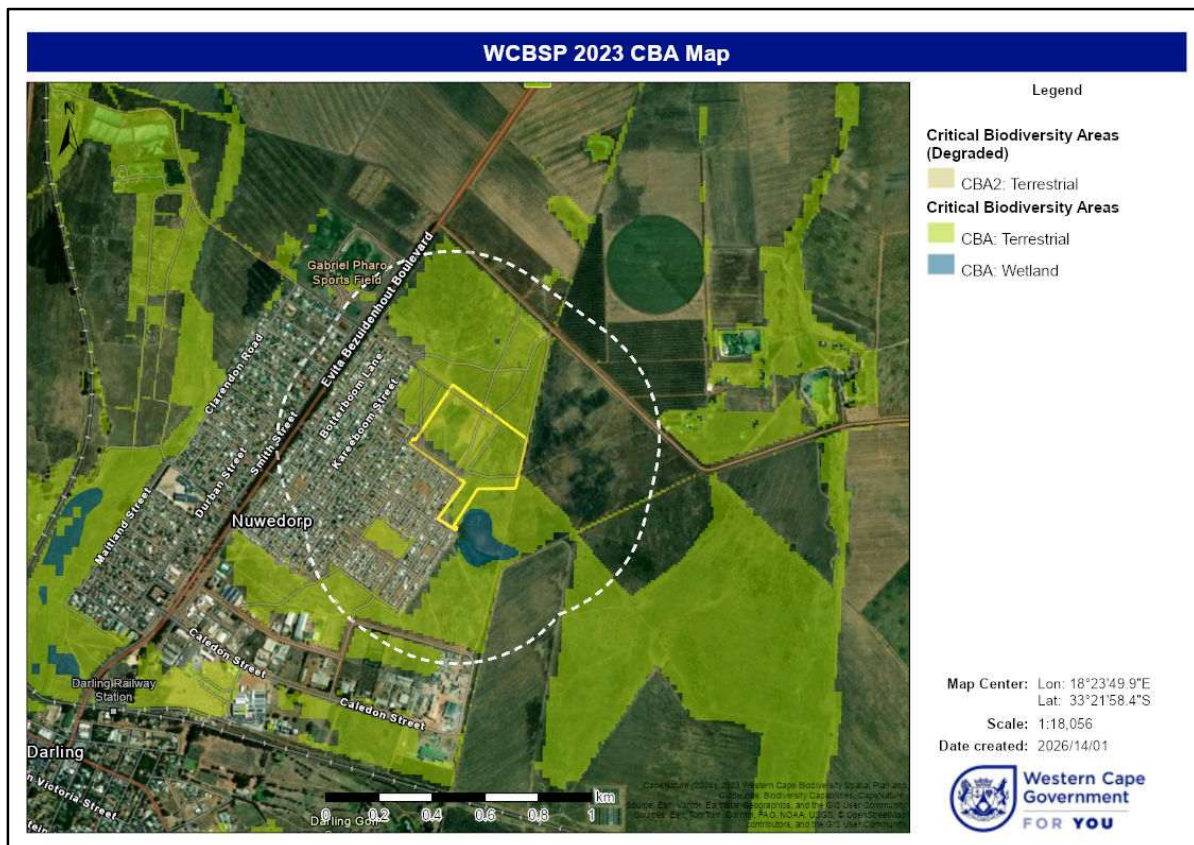


Figure 4: WCBSP 2023 Map (available from Cape Farm Mapper, 2026) showing that the entire site comprises a Terrestrial CBA. Note that the wetlands to the north of the site are indicated as aquatic CBAs.

5. Site visit and Groundtruthing

EnviroSwift visited the site on 29 December 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 traversed thoroughly and the site showed a sparse vegetation cover, mostly alien annual grasses and shrubs, typical of land that has been historically cultivated (see Figures 5 and 6). There was no evidence of hydrophytic vegetation or any topographical features that could concentrate surface run-off as the site is almost totally flat.

Approximately 120m to the north of the site a depression in the topography was evident which contained hydrophytic vegetation in the form of an unidentifiable sedge, possibly a *Juncus* sp. (see Figure 7). The reason why the sedge could not be identified was because it was in a senescent stage, most likely due to the effect of the dry season with no recent rainfall causing the plants to dry out.

Given that a depression wetland was mapped in close proximity to the southern portion of the proposed development, the presence of the wetland required groundtruthing to confirm their presence/absence. The presence of this wetland system was confirmed as occupying a clear depression in the topography (see Figure 8). While most of the vegetation in the area had been recently burnt by fire, hydrophytic vegetation was still clearly evident in the form of *Cynodon dactylon* (kweek) and the same identifiable sedge, possibly a *Juncus* sp. (see Figures 9).

Given that this off-site depression wetland was openly accessible EnviroSwift conducted augering within the depressional area. The auger results showed evidence of organic streaking which is characteristic of temporary/seasonal wetlands (see Figure 10). On the basis of the site investigations a Wetland Delineation Map has been prepared (see Figure 11).



Figure 5: View across the proposed site from its eastern boundary looking westwards.



Figure 6: View towards the propose site which comprises a north-eastwards expansion of the existing residential area visible in the background.



Figure 7: View of the wetland located approximately 100m to the north of the proposed development site. Note the senescent sedges (Cyperaceae) which are visible as clumps throughout the depressional area.



Figure 8: View of the depression wetland with the existing residential area in the background. A recent fire has burnt most of the vegetation in the wetland.



Figure 9: Hydrophytic vegetation, *Cynodon dactylon* (kweek) and a senescent species of Cyperaceae within the mapped and groundtruthed depression wetland.



Figure 9: Auger sample taken from within the mapped and groundtruthed depression wetland. Note the organic streaking which is indicative a temporary/seasonal wetland conditions.

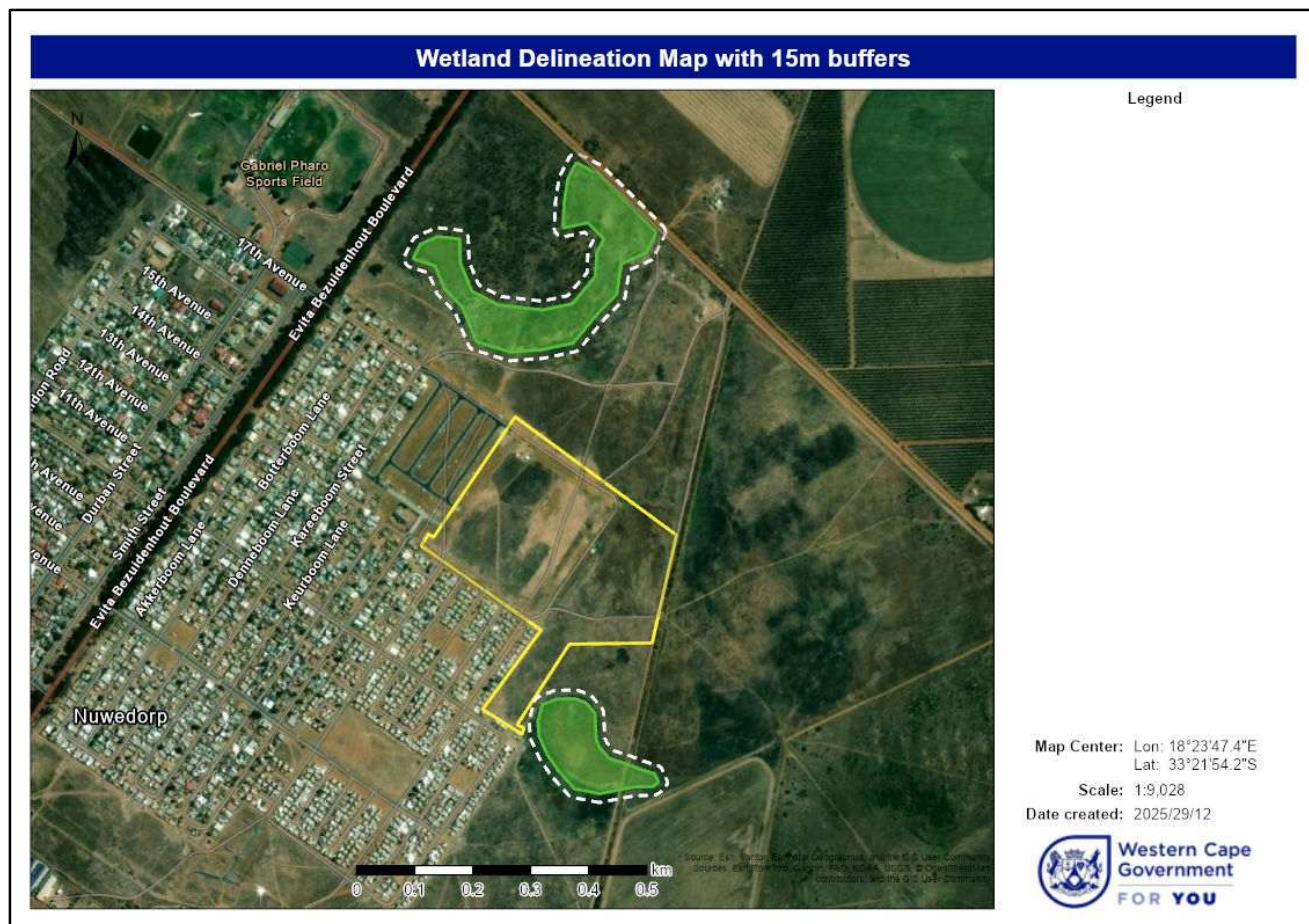


Figure 11: Wetland Delineation Map with 15m buffers indicated. Note the 15m buffer of the southern depression wetland does not encroach the proposed site.

6. Preliminary Assessment of Risk

While groundtruthing has confirmed that the site contains no watercourses as defined in terms of the relevant environmental legislation (see Section 3) depression wetlands have been identified approximately 15m and 120m from the site boundary and hence the development occurs within the NWA Regulated Area of these wetlands (500m). These wetlands both occur within the mapped extent of West Coast Granite Renosterveld wetland vegetation type (NFEPA, 2011) in which all wetland types are listed as Critically Endangered (CR). This means that these wetlands need protection and opportunities for the restoration should be pursued where feasible.

The wetlands include the mapped and groundtruthed depression wetland (indicated as a CBA wetland on the WCBSP, 2023) approximately 15m east of the southern portion of the proposed site and another groundtruthed depression wetland, not mapped on any database, located approximately 120m to the north of the proposed site. Given their location off-site they would not be directly impacted by the proposed development. In order to determine whether any of these wetlands are at risk of being indirectly impacted as a result of the proposed development, a determination of the direction of surface flow from the site is required as only watercourses hydrologically coupled with the site would be at risk of being indirectly impacted.

The Surface Flow Direction Map presented in Figure 12 presents the direction of flow based on topography and what is evident is that run-off from in the greater area is in a north-easterly direction. What this indicates is that the wetlands are at negligible risk of being impacted as stormwater run-off is a primary carrier of aquatic biodiversity degradation as pollution, sedimentation and flow regime impacts are caused in this manner. Unmanaged stormwater run-off from the site will eventually discharge into some part of the wetland system by which stage many suspended solids or pollutants in the run-off would have been filtered out given the distance that the run-off would have to migrate between the site and any receiving watercourse. Flow regime alteration would also be largely mitigated as infiltration would have occurred before the run-off reaches any off-site wetlands.

The wetland system immediately east of the southern portion of the site is mapped as a CBA wetland which means that the stated land management objective is “to restore and/or manage the area to minimize impacts on ecological processes and ecological infrastructure functioning, especially soil and water-related services, and to allow for faunal movement”. As such efforts need to be made to prevent further degradation of the wetland system. This study has found that there is a potential risk to the CBA wetland given the limited distance ($\pm 15\text{m}$) between the site and the wetland. However, the flat topography and the direction of flow of surface run-off which is not in the direction of the wetland suggests that the risk will be very low.

As there is a quantum of risk to the CBA wetland, the opportunity to mitigate the risk needs to be explored. Best practise in urban stormwater management is to manage stormwater in terms of quantity and quality and should be based on Sustainable Urban Design Systems (SUDS). Accordingly, it is recommended that the stormwater management approach be based on SUDS and that the stormwater is managed both in terms of quantity (i.e. that post-development flows do not exceed pre-development flows) and in terms of quality (i.e. that key nutrients and suspended solids are reduced significant). Also, given the additional mandatory requirement for the formulation and implementation of an Environmental Management Plan (EMP) to manage potential environmental impacts associated with the construction phase, the risk to the wetland system would be eliminated.

Another measure that is typically adopted to minimise risk is the incorporation of buffer zones, areas that will remain naturally vegetated and provide a buffering effect from the edge effects of development and also allow for stormwater infiltration and polishing. According to the National Buffer Guidelines (Macfarlane and Bredin, 2017), the worse-case, minimum buffer width for residential development is 15m. This equates to the distance between the wetland edge and the site boundary. Provided this area remains vegetated in perpetuity the risks to the wetland would be further mitigated.

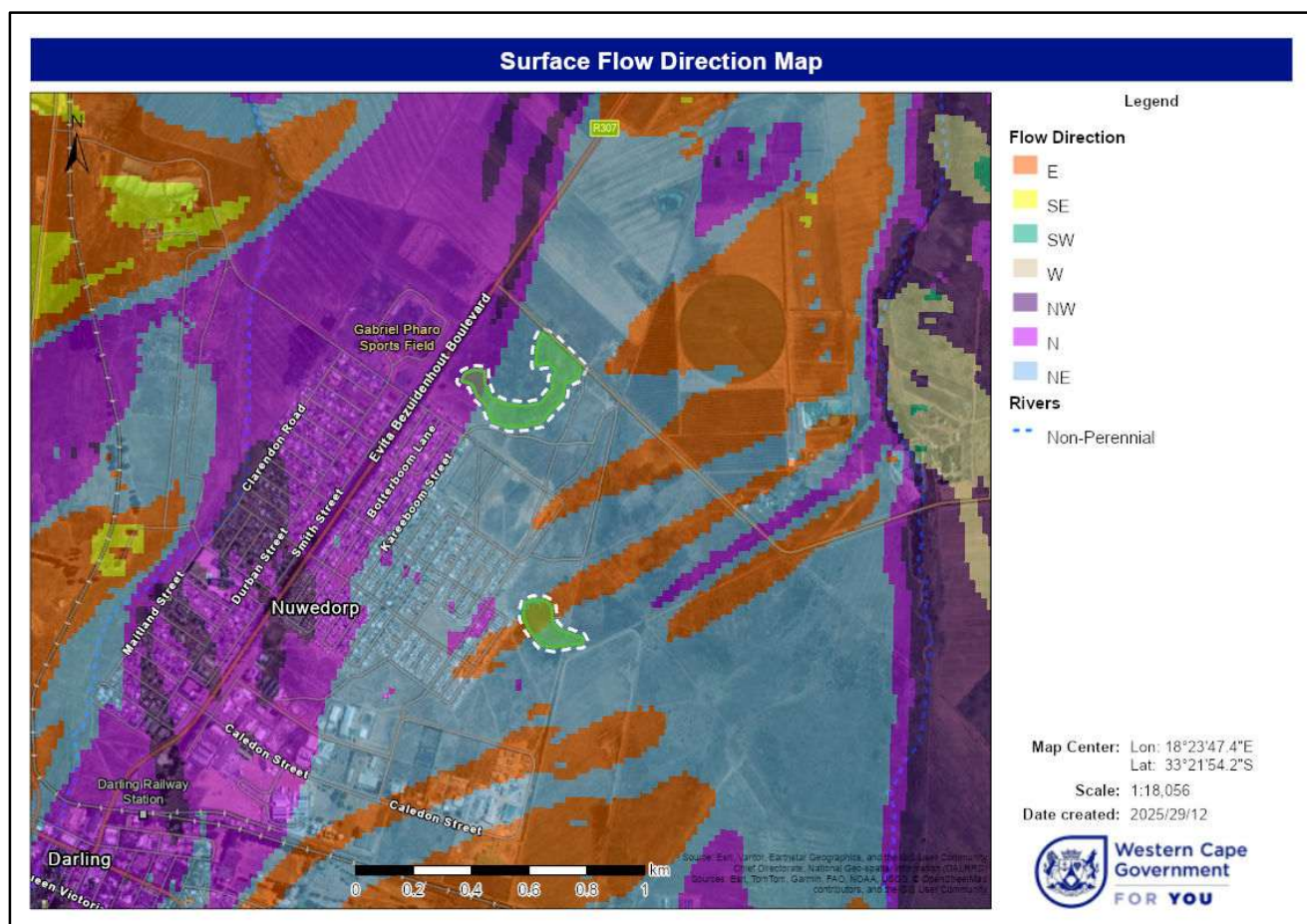


Figure 12: Surface Flow Direction Map (Source: Cape Farm Mapper, 2026).

7. Key Findings & Recommendations

Available desktop resources indicate that the site contains no aquatic biodiversity features and map only a depression wetland, indicated as a CBA wetland on the WCBSP (2023), approximately 15m east of the southern portion of the proposed site. Groundtruthing confirmed the presence of the CBA wetland and another depression wetland approximately 120m to the north of the proposed site. The proposed development is therefore confirmed to be within the NWA Regulated Area of these mapped wetlands which then groundtruthed by EnviroSwift on 29 December 2025 which confirmed their presence. Having confirmed the presence of the wetlands EnviroSwift undertook a preliminary assessment of risk to determine if the risk to the wetlands could be eliminated, thereby avoiding any Section 21 c and i activities.

An analysis of topography and in particular the Surface Flow Direction Map (see Figure 12) suggests that while stormwater flows predominantly in a north-east direction (i.e. stormwater run-off from the site, the main conduit for impacts on the wetland system, will not be directly towards the CBA wetland), there is still a quantifiable risk to the wetland which necessitate effective mitigation. EnviroSwift then identified a number of measures most of which comprise construction-phase environmental specifications for inclusion in a Construction phase EMP.

Given that this assessment confirms that an aquatic ecosystem, a CBA wetland, occurs within 32m of the site boundary, Activity 12 of LN 1 is potentially triggered. Also, the lack of any aquatic biodiversity within the site supports the Screening Report output which is that the site has a LOW Aquatic Biodiversity sensitivity. In terms of the NWA, provided the recommended mitigation measures summarised below are implemented then the proposed development will not pose any risk to the only aquatic ecosystems at potential risk, the depression wetlands situated approximately 15m to the east of the southern portion of the site and approximately 120 m to the north of the site:

- Maintain the 15m buffer area between the development edge and the wetland edge in a vegetated state in perpetuity.
- The stormwater management approach must be based on SUDS and the stormwater must be managed both in terms of quantity (i.e. that post-development flows do not exceed pre-development flows) and in terms of quality (i.e. that key nutrients and suspended solids are reduced significantly).
- Formulate and implement of an EMP to manage potential environmental impacts associated with the construction phase. Incorporate the following mitigation measures to ensure that the risk of the wetlands being indirectly impacted is eliminated:
 - Declare the areas beyond the boundaries of the site as No-Go areas for the Contractor. This means that the off-site wetlands and the associated 15m buffer is off-limits for construction vehicles, machinery and personnel. Sever penalties should be enforced should the Contractor not comply with this mitigation measure.
 - No stockpiles may be located within 30m of any wetland and associated buffer;
 - The ECO shall designate the site for stockpiling (note this should preferably take place at the Construction Camp but alternative sites can be identified but no closer than 30m from any wetland and associated buffer, in consultation with the ECO);
 - Protect soil stockpiles during the winter rainy season from erosion using a tarp or erosion blankets;
 - The ECO must advise on measures to ensure that run-off from cleared areas and stockpiles located within 50m of the wetlands is contained and encouraged to infiltrate rather than discharge off-site.
 - Implement erosion control measures in order to prevent erosion and sedimentation of the receiving wetlands as required by the ECO. For example. strategically place straw bales or sediment fences/traps, to divert stormwater away from areas susceptible to erosion etc.);
 - Any sediment contaminated runoff should be contained and allowed to settle before being discharged. The settled-out sediment collected in this manner should be cleared manually as needed and removed from site;
 - The ECO shall, for the duration of the winter rainy season, check erosion control measures weekly to ensure these are still intact (and cleared of sediment in accordance with the recommendations above) as needed;
 - The ECO shall check the site for erosion damage and sedimentation after heavy rainfall events. Should erosion or sedimentation be noted, immediate corrective measures must be undertaken;

A handwritten signature in black ink, appearing to read 'N. Steytler', with a long horizontal flourish extending to the right.

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

REFERENCES

Council for Scientific and Industrial Research (CSIR). 2018. National Wetland Map 5 and Confidence Map [Vector] 2018. Available from: SANBI BGIS <https://www.sanbi.org/link/bgis-biodiversity-gis/>

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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.

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

APPENDIX A:
CV of the Specialist

Curriculum Vitae
of
NICHOLAS STEYTTLER
Director – EnviroSwift Western Cape



CONTACT DETAILS

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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, MJ. 1995. 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:

Aquatic Biodiversity Compliance Statement for the proposed residential development on Remainder Erf 22, Riversdale, Hessequa Municipality, Western Cape (2025)

Aquatic Biodiversity Assessment for the proposed development of a Petroport at on Portion 7 of the Farm Jacobus Kraal No. 544, near Yzerfontein, Western Cape (2025)
Aquatic Biodiversity Compliance Statement for the proposed affordable/low-cost housing in Nuwerus, Northern Cape (2025)
Independent Peer Review of the Aquatic Biodiversity Compliance Statement undertaken by Enviro-EAP for the proposed development of a Water Treatment Works for Heidelberg, Western Cape (2025)
Independent Peer Review of the Aquatic Biodiversity Assessment undertaken by Enviro-EAP for the proposed development of affordable/low-cost housing in two areas in Clanwilliam, Western Cape (2025)
Independent Peer Review of the Aquatic Biodiversity Assessment undertaken by Enviro-EAP for the proposed development of affordable/low-cost housing including the development of a new water supply reservoir in Citrusdal, Western Cape (2025)
Aquatic Biodiversity Compliance Statement for the proposed residential development of Remainder Erf 474 St. Helena Bay, Saldanha Bay Municipality, Western Cape (2025)
Aquatic Biodiversity Compliance Statement for the proposed development of an off-stream dam of storage capacity of 125 500m³ on Portion 24 of the Farm Misgunt No. 499, Citrusdal, Western Cape (2025)
Freshwater Screening Study for Erf 9882 Hout Bay, City of Cape Town (2025)
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, 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 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, Franschoek (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 Bottellary 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 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, Port St. Johns, Eastern Cape (1998)
Preparation of a decision-support manual for community-based urban riparian systems management (RIPARI-MAN) for WWF-SA (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)