

environmental affairs

Department: Environmental Affairs REPUBLIC OF SOUTH AFRICA

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DETAILS OF SPECIALIST AND DECLARATION OF INTEREST

File Reference Number: NEAS Reference Number: Date Received:

(For official use only)	
14/12/16/3/3/2/1064	
DEA/EIA	

Application for integrated environmental authorisation and waste management licence in terms of the-

- (1) National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014; and
- (2) National Environmental Management Act: Waste Act, 2008 (Act No. 59 of 2008) and Government Notice 921, 2013

PROJECT TITLE

Wild Coast Special Economic Zone Environmental Impact Assessment

Specialist:	Eco-Pulse Environmental Consulting Services cc					
Contact person:	Mr. Adam Teixeira-Leite					
Postal address:	26 Mallory Road, Hilton, KZN					
Postal code:	3245	Cell:	082 310 6769			
Telephone:	+27 31 2666 700					
E-mail:	ateixeira@eco-pulse.co.za					
Professional	Professional Natural Scientist	(Pr.Sci.Nat.) v	vith SACNASP under the			
affiliation(s) (if any)	fields of practice: 'Ecological S	cience' & 'En	vironmental Science'			
Project Consultant:	WSP Environmental (Pty) Ltd					
Contact person:	Tutayi Chifudza					
Postal address:	PO Box 98867, Sloane Park					
Postal code:	2191 Cell: 073 770 1635					
Telephone:	011 361 1390 011 361 1301					
E-mail:	Tutayi.Chifadza@wsp.com					

4.2 The specialist appointed in terms of the Regulations_

I, Adam Teixeira-Leite , declare that -

General declaration:

I act as the independent specialist in this application;

I will 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 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 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;

all the particulars furnished by me in this form 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.

S.

Signature of the specialist:

Eco-Pulse Consulting

Name of company (if applicable):

26 July 2018

Date:

CURRICULUM VITAE

Adam Teixeira-Leite

Eco-Pulse Consulting



environmental consulting services

26 Mallory Road, Hilton 3245, South Africa +27 (0) 82 310 6769 ateixeira@eco-pulse.co.za

PERSONAL DETAILS

Date of Birth: Identity Number: Nationality: Languages: 9 March 1984 8403095097083 South African English, Afrikaans (second language), German (third language)

TERTIARY QUALIFICATIONS

Degree(s) obtained	Institution/Date
BSc Envs: Degree in Environmental Science (Earth Sciences Stream)	University of KwaZulu-Natal (2003 – 2006)
BSc Hons Envs: Honours degree in Environmental Science (wetland ecology and management) (Graduated Cum Laude)	University of KwaZulu-Natal (2007)
MSc Environmental Science (in prep). Thesis deals with monitoring of wetland rehabilitation outcomes at a biodiversity offset site in northern KZN.	University of KwaZulu-Natal

RECORD OF EMPLOYMENT

Year(s)	Position	Company
2008 – 2010	Environmental Consultant	Institute of Natural Resources
2010 – 2011	Contracted Consultant	Institute of Natural Resources
2011 – 2012	Part time lecturer	University of KZN (Edgewood)
2011 - Present	Senior Scientist	Eco-Pulse Consulting

CURRENT POSITION AND RESPONSIBILITIES

Senior scientist and wetland/terrestrial ecologist at Eco-Pulse Consulting, with >10 years' experience in environmental consulting and undertaking specialist wetland/aquatic and terrestrial biodiversity assessments. Current responsibilities include:

- Undertaking specialist wetland, river and biodiversity related assessments for a range of clients
- Specialist reporting
- Drafting rehabilitation plans for wetlands, rivers/riparian areas and terrestrial habitat types
- Terrestrial ecological/biodiversity, invasive alien plant and vegetation surveys
- Compiling Water Use License Applications (WULAs)
- Liaising with clients
- Project management
- Review of reports and deliverables
- Peer reviews
- Supervising and mentoring of junior scientists (>4 years' experience)
- Facilitating workshops and presenting on outcomes of projects

RELEVANT EXPERTISE

Project Experience in the Environmental Sciences, Specialist Aquatic/Wetland Science/Ecology and Environmental Management fields:

- Wetland related assessments and research: Extensive experience in wetland-related studies for a number of wetland systems in KwaZulu-Natal, Eastern Cape and Gauteng including: wetland delineation, Wet-Health functional assessments, Wet-Ecoservices assessments, compilation of wetland management plans (for Mount Moreland wetland system for example) and involvement in the 'quantifying the benefits of wetlands in the upper Orange Senqu Basin' as part of the EU funded NeWater study. Wetland rehabilitation planning for SANBI: Working for Wetlands in KZZ and Free State Provinces. Involved with other wetland rehabilitation and management projects (e.g. Fairbreeze Mine Biodiversity Offset Management Plan, Edendale Business/Industrial Park).
- Wetland rehabilitation: Extensive experience in planning wetland rehabilitation projects as the wetland ecologist for SANBI Working for Wetlands Programme (in KZN and Free State (2012 to 2016).
- Wetland & Biodiversity Offsets: Experience in the application of biodiversity offsets to compensate for environmental loss related to large-scale mining projects (eg. Fairbreeze Mine Biodiversity Offset Management Plan, DubeTradePort Wetland Offset Strategy).
- Water Use Licensing: Experience in leading and completing numerous WULAs in KZN and the Eastern Cape.
- Environmental Auditing: Environmental auditor for the King Shaka International Airport during the construction phase of the project; Environmental auditor for the SANRAL N2 Interchange development linking to the King Shaka International Airport - including report back to relevant environmental authorities and stakeholders (Construction Monitoring Committee and Swallows/Wetland Forum). Auditor responsible for auditing environmental and economic/social compliance with the PCIS (Procedures, Criteria, Indicators and Standards) for sustainable forestry management for a range of Department of Forestry (DAFF) managed forestry plantations in KZN and EC provinces.
- River-related studies: Various projects where specialist fluvial geomorphology assessments were required (for example: work done for the Lesotho Highlands Development Agency pertaining to the Senqu River and Katse Dam); part of team involved in River Reserve assessment for the uMzimkhulu River; responsible for conducting baseline riparian vegetation (VEGRAI) and riparian habitat (IHI) for the R61 road development project between Umthatha and Port St Johns, Eastern Cape.
- Aquatic Bio-monitoring: involved in surveying of river channels, geomorphology assessments, water-quality monitoring and analysis, as well as wetland assessments for the various river and wetland systems impacted by the King Shaka International Airport project
- Biodiversity Assessments: involved in undertaking desktop and field-based terrestrial biodiversity studies for various project in KZN and Eastern Cape; part of the team responsible for developing a Biodiversity Sector Plan for the Ugu District Municipality, KZN. Extensive experience in undertaking invasive alien plant surveys and audits.
- > **Development of EMFs** (Environmental Management Framework) for the Umshwathi Municipality (and the Msunduzi Municipality (Biodiversity and wetlands).
- WRC projects (for example project on National Wetland Buffers Guidelines and Wetland Offsets guidelines).
- Forestry Audits: auditor responsible for auditing compliance of DAFF managed plantations against the PCI&S framework in KZN and Eastern Cape.
- Project Management: including management of team involved in bio-monitoring at King Shaka International Airport and management of specialist aquatic monitoring team for Umgeni Bulk Water Transfer Project. Management and mentoring of junior scientists for a number of recent projects in KZN and the Eastern Cape Province, South Africa.
- Mentorship: 6 years experience in mentoring junior scientists in the field of wetland science and terrestrial ecological assessment.

PROFESSIONAL MEMBERSHIPS AND AFFILIATATIONS

- Registered **Professional Natural Scientist** (*Pr. Sci. Nat.*) with SACNASP (South African Council for Natural Scientific Professions) under the following fields of practice: Ecological Science and Environmental Science since 2013
- Founding member of the South African Wetland Society (SAWS); membership No. 70Y8XFWD
- Member of the KZN Wetland Forum
- Member of the eThekwini Biodiversity Forum
- Member of the National Business and Biodiversity Offsets Forum
- Member of the KZN Forest Conservation Network
- Member of WESSA (Wildlife & Environment Society South Africa), Member No. MB1242036
- Volunteer member of Green Peace, South Africa (Durban)
- Supporter of 'A Rocha': International Christian Conservation NGO/NPO

HONOURS, AWARDS AND SPECIAL ACHIEVEMENTS

- Finished in the Top 20 in the greater Durban region for Matric Finals in 2001
- Scholarship for outstanding achievement received in 2005
- Scholarship based on merit obtained in 2007 towards an Honours degree in Environmental Science
- Graduated with dean's commendation (final year mark 85%) in 2006
- Graduated Honours Cum Laude in 2007

OTHER RELEVANT INFORMATION (E.G. PUBLICATIONS & CONFERENCES)

Publications include:

Sullivan, CA, Macfarlane, D, Dickens, C, Mander, M, Bonjean, M, Teixeira-Leite, A & Pringle, C 2008. Keeping the benefits flowing and growing: quantifying the benefits of wetlands in the upper Orange-Senqu Basin. Report to NeWater, a project funded under the Sixth Research Framework of the European Union, Institute of Natural Resources, Pietermaritzburg, South Africa. Paper available online at: <u>http://www.newater.info/index.php?pid=1065</u>

Conferences, Training and Workshops attended:

- 5 day National Wetlands Indaba held in Kruger National Park (2008)
- 2 day Workshop on Habitat Creation as Offset for Coastal Development held in Richard's bay (2009)
- 1 day IAIA (International Association of Impact Assessment) annual conference held in Ballito (2009)
- 2 day course on the advanced use of Wet-Health in wetland functional assessment held at CEAD (Centre for Environment and Development), University of KwaZulu-Natal (Pietermaritzburg Campus (2009)
- 2 day Eskom Distribution Environmental Screening Document Course (DESD), Eskom Department of Land Development, New Germany, Durban (2009)
- 1 day NFEPA (National Freshwater Ecosystem Priority Areas) workshop at Ezemvelo KZN Wildlife Offices, Queen Elizabeth Park, Pietermaritzburg, KZN (2011)
- 3 day Wetlander Workshop at the Zaalklapspruit wetland (Mpumalanga) as part of the SANBI Working for Wetland Programme to discuss approaches to wetland health and functional assessment as well as monitoring recovery of wetland post-rehabilitation (2014)
- 1 day workshop: Business and Biodiversity Network in Mount Edgecombe, Durban, KZN (2015)
- 3 day advanced and speiclaist training in the application of the AWS (Alliance for Water Stewardship) International Water Stewardship Standard (2016)
- 2 day course through ALUT on grassland species identification and veld condition assessment (2017)
- 4 day National Wetlands Indaba held at the Wildcoast Sun in KZN (2017)

Other skills (e.g. computer literacy, etc.):

- GIS Systems: Competent in Arc View, ArcGIS 9 and 10 and Google Earth Mapping, modelling and data analysis.
- Microsoft Windows: Competent Basic functionality and file storage.
- Microsoft Excel: Very Competent experience in data handling & manipulation. Calculations, Piv ot tables, Graphs, higher level functionality.
- Microsoft Word: Highly competent Excellent report writing skills including general documentation, scientific reports and popular publications (Graphs, graphics, tables).

- Microsoft Power Point: Highly competent Excellent presentation skills.
 Competent in topographic surveying using a standard dumpy level and staff

PAST AND EXISTING CLIENTS

	Client Name	Location	Contact	Contact Details
1	GIBB	Westville,	Ms. Katherine	kwiles@gibb.co.za
•		eThekwini, KZN	Wiles	071 355 8781 thornhillm@thorn-ex.co.za
2	Thorn EX	Hilton, KZN	Ms. Marita Thornhill	084 5014665
3	SRK Consulting	Westville, eThekwini, KZN	Ms. Phillipa Emanuel	PEmanuel@srk.co.za 083 651 3462
4	Ground Water Consulting Services (GCS)	Kloof, eThekwini, KZN	Mr. Chris Wright	<u>chris@gcs-sa.biz</u> 031 764 7130
5	Afzelia Environmental Consulting	Morningside, eThekwini, KZN	Mr. Andrew Batho	andrew@afzelia.co.za 083 601 9411
6	Tronox KZN Sands	Mtunzini, KZN	Mr. Marius Vlok	<u>marius.vlok@tronox.com</u> 083 709 6556
7	Aurecon	Cape Town, Western Cape	Mr. Fareed Nagdi	Fareed.Nagdi@aurecongroup.com 083 792 0872
8	Kerry Seppings (KSEMS)	Hillcrest, eThekwini, KZN	Mr. Colin Holmes	<u>colin@ksems.co.za</u> 072 291 2313
9	Department of Forestry & Fisheries (DAFF)	Pretoria, Gauteng	Ms. Makhwena	073 652 4040
10	SANBI, DEA	Free State	Mr Andre Beetge	<u>ABeetge@environment.gov.za</u>
11	Zululand Anthracite Colliery (ZAC)	Ulundi, KZN	Mr Isaac Dindi	<u>isaacd@zulac.co.za</u> 071 021 0444
12	eThekwini Municipality (EPCPD)	eThekwini, KZN	Mr Bheka Nxele	<u>Bheka.Nxele@durban.gov.za</u> 027 82 7809 499
13	Guy Nicholson Consulting	Kloof, eThekwini, KZN	Mr Guy Nicholson	<u>guyn@saol.com</u> 082 772 9941
14	E&D Consulting	Empangeni, KZN	Mr Paul Scherzer	paul@edcs.co.za 084 207 6031
15	Metamorphosis Environmental Consulting	Hillcrest, eThekwini, KZN	Ms. Vicki King	vicki@metamorphosisdbn.co.za 076 420 1441
16	Synergistics Environmental Consulting	Howick, KZN	Mr. Matthew Hemming	matthew@synergistics.co.za
17	Mhlathuze Water	Richards Bay, KZN	Ms. Nonhle Makhayna	nmakhanya@mhlathuze.co.za +27 35 902 1016
18	Ezemvelo KZN Wildlife	Pietermaritzburg, KZN	Mr. Boyd Escott	escottb@kznwildlife.com
19	NCC Environmental Services	Western Cape	Mr. Christian Gerhardt	<u>christiang@ncc-group.co.za</u> 072 261 0301
20	Terreco	Eastern Cape	Ms. Jaclyn Smith	<u>smithj@terreco.co.za</u> 072 555 0464 / 043 721 2344
21	Triplo 4 Consulting	Ballito, KZN	Ms. Chen Read	<u>chen@triplo4.com</u> 072 049 0888
22	Janet Edmonds Consulting	Pietermaritzburg, KZN	Ms. Janet Edmonds	<u>janet@jecenviro.co.za</u> 082 828 7953
23	Wildlands Conservation Trust	Hilton, KZN	Mr. Andrew Whitley	andreww@wildlands.co.za 071 875 7241
24	Green Door Environmental	Hilton, KZN	Ms. Rebecca Bowd	rebecca@greendoorgroup.co.za 072 181 4263
25	Enviro Edge	Kloof, eThekwini, KZN	Mr. Steven Whitaker	<u>steven@enviroedge.co.za</u> 071 140 8350
26	RHDHV	Pinetown, eThekwini, KZN	Ms. Humayrah Bassa	Humayrah.Bassa@rhdhv.com 031 719 5551 / 083 642 7077
27	Graham Projects	Ballito, KZN	Mr. Mike Graham	grahamprojects@mweb.co.za

	Client Name	Location	Contact	Contact Details				
				083 456 8787				
28	Isolendalo	Margate, KZN	Mr Welcome Nogobela	wnogobela@isolendalo.co.za 039 315 0437 / 083 408 5737				
29	K2M Consulfing	eThekwini, KZN	Ms. Simitha Bechan	<u>simitha@k2m.co.za</u> 072 602 7669				
30	Green Scene Environmental	eThekwini, KZN	Ms. Felicity Swanepoel	felicity@green-scene.co.za 071 355 0266				
31	Savannah SA	Richards Bay, KZN	Ms. Dilona Simoai	dilona@savannahsa.com 011 656 3237				
32	Dube TradePort	eThekwini, KZN	Mr Zama Dlamini	Zama.Dlamini@dubetradeport.co.za				
33	Transnet	Richards Bay, KZN	Ms. Nkuli Hadebe	Nonkululeko.Hadebe@transnet.net 035 9053849				
34	Natal Portland Cement (NPC)	eThekwini, KZN	Ms. Avanti Maharaj	AAMaharaj@intercement.com 062 514 0058				

RECENT & RELEVANT PROJECT EXPERIENCE

Project Name	Client	Location	Date	Project Description
Sterkspruit Aggregates WULA	Natal Portland Cement	eThekwini KZN	Current Project	Water Use License Application for existing quarry site
South Coast Stone Crushers WULA	Natal Portland Cement	Margate, KZN	Current Project	Water Use License Application for existing quarry site
Widenham WULA	Hibiscus Retirement Village	Widenham, eThekwini, KZN	2018	Specialist wetland/aquatic assessment and Water Use License Application for retirement village
ERF 104/105 Drummond WULA	TJ Architects	Drummond, eThekwini, KZN	2018	Specialist wetland/aquatic assessment and Water Use License Application for mixed-use development
Richlands Estate WULA	Delcairn Investments	Kloof, eThekwini, KZN	2018	Specialist wetland/aquatic assessment and Water Use License Application for housing estate development.
Fairbreeze Mine Biodiversity Offset Management Plan	Tronox KZN Sands	Mtunzini, KZN	Current Project	Development of a biodiversity offset plan, from strategic level to conceptual and detailed rehabilitation plans, operational management plans and monitoring schedules.
Umgeni Water Pipeline Aquatic and Wetland Assessment: Mhlabatshane	SiVEST/Procura	KZN	2017	Wetland and aquatic assessment and impact assessment.
Umgeni Water Pipeline Aquatic and Wetland Assessment: Mhshwathi	SiVEST/Procura	KZN	2017	Wetland and aquatic assessment and impact assessment.
Hilcove Hills Wetland and Aquatic Assessment for WULA	Guy Nicolson Consulting	Pietermaritzburg, KZN	2017	Wetland and aquatic assessment and impact assessment.
Wildcoast stone quarry wetland and terrestrial ecological assessment	SLR Consulting	Eastern Cape	2017	Terrestrial ecological and wetland/aqautic assessment for EIA and WULA (scoping and EIA phase).
Wildcoast Stone Quarry Aquatic Assessment + WULA	SLR Consulting	Eastern Cape	Current Project	Wetland/aquatic baseline assessment and impact assessment and WULA.

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Quarry Ecological Assessment	SLR Consulting	Eastern Cape	2017	Terrestrial ecological assessment and vegetation survey with impact assessment.
Mondi-WWF Water Stewardship Pilot Project	WWF	Zululand, KZN	2017	Piloting the AWS international water stewardship standard for selected Mondi plantations in Zululand.
Cato Ridge SDP Aquatic Assessment	NS Environmental	Cato Ridge, eThekwini, KZN	2017	Wetland/aquatic baseline assessment and impact assessment.
Mondi Richards Bay Mill AWS Pilot Study	Mondi-WWF	Richards Bay, KZN	2017	Piloting the AWS international water stewardship standard for Mondi's Pulp and Paper Mill in Richards Bay.
RBT Extension Wetland Assessment	SRK Consulting	Richards Bay, KZN	2017	Wetland/aquatic baseline assessment and impact assessment.
Access World Sulphur Spill Wetland Rehabilitation & Management Plan	Metamorphosis	Richards Bay, KZN	Current Project	Development of a wetland rehabilitation and planting plan.
RHDHV Boutique Hotel Wetland Assessment	RHDHV	Pietermaritzburg, KZN	2017	Wetland/aquatic baseline assessment and impact assessment.
RHDHV Boutique Hotel Terrestral Ecological Assessment	RHDHV	Pietermaritzburg, KZN	2017	Terrestrial ecological assessment and vegetation survey with impact assessment.
N2-N3 Road Upgrade Wetland & Aquatic Assessment	ACER AFRICA / SANRAL	eThekwini, KZN	2017	Wetland/aquatic baseline assessment and impact assessment, biomonitoring plan and wetland rehabilitation plan.
Wewe-Driefontein Mixed-Use Development Wetland Assessment	Guy Nicolson Consulting	eThekwini, KZN	2017	Wetland/aquatic baseline assessment and impact assessment, contingency plan, biomonitoring plan.
Wetland Rehabilitation Planning for Working for Wetlands (Free State)	Working for Wetlands (SANBI)	Free State	2016	Identifying, prioritizing and assessing wetlands to inform rehabilitation planning across a range of project areas in the Free State.
Hilton-Mondi Wetland & Aquatic Assessments	Arctic Sun Property Developments	Hilton, KZN	2016	Full aquatic/wetland baseline ecological assessment, development of a rehabilitation plan for wetlands, contingency plan and wetland management and monitoring programme.
Transnet RB South Dunes Lease WULA Wetland Assessment	KSEMS	Richards Bay, KZN	2016	Wetland baseline assessment, management plan, rehabilitation plan and monitoring protocol.
Grindrod Gypsum Spill Wetland Assessment	uMhlathuze Water	Richards Bay, KZN	2016	Wetland rehabilitation plan.
Ballito Housing Development Wetland Assessment	CENPROP DEVELOPMENTS, AF Planning	Ballito, KZN	2016	Full aquatic/wetland baseline ecological assessment, development of a rehabilitation plan for wetlands, contingency plan and wetland management and monitoring programme.
La Maine Adventure Valley Wetland Assessment	La Maine	Ballito, KZN	2016	Full aquatic/wetland baseline ecological assessment, development of a rehabilitation plan for wetlands, contingency plan, storm water management plan and wetland management and monitoring programme.
Barrier Lane Sheffield Ecological Scan		Ballito, KZN	2016	Ecological scan (aquatic).
D2283 & L1346 Roads Terrestrial Vegetation Assessment	RHDHV	KZN	2016	Terrestrial vegetation survey and impact assessment.

D2283 & L1346 Roads Wetland and Aquatic Assessment	RHDHV	KZN	2016	Wetland/aquatic baseline assessment and impact assessment.
Mfolozi River Bridge Aquatic and Terrestrial Vegetation Assessment	RHDHV	Mfolozi/Hluhluwe , KZN	2016	Terrestrial vegetation survey and impact assessment.
P236 Road Upgrade Ubombo Aquatic and Terrestrial Assessment	RHDHV	Ubombo, KZN	2016	Terrestrial vegetation survey and impact assessment.
Impendle Waste Sorting/Recycling Facility Wetland Screening Assessment	GIBB	Bulwer, KZN	2016	Wetland screening assessment.
Assessment Mshwathi Waste Sorting/Recycling Facility Wetland Screening and Terrestrial Ecological Assessment	GIBB	Mswathi, KZN	2016	Terrestrial ecological survey of faun and flora.
Richards Bay IDZ Phase 1F Gas Power Plant EIA: Terrestrial Ecological Assessment	Savannah Environmental	Richards Bay, KZN	2016	Terrestrial vegetation and habitat assessment and impacts assessment, development of a plant rescue and translocation programme.
Springvale Estate Wetland Rehabilitation Planning & Support	DG Investments	Ballito, KZN	2016	Full aquatic/wetland baseline ecological assessment, development of a rehabilitation plan for wetlands, contingency plan, storm water management plan and wetland management and monitoring programme.
La Maine Valley Wetland Rehabilitation Planning & Support	La Maine	Ballito, KZN	2016	Support for rehabitation planning with Working for Water.
Umgeni Water: Bruynshill Pipeline Wetland and Aquatic Assessment	Procura Management	Wartburg, KZN	2016	Wetland/aquatic baseline assessment and impact assessment.
Umgeni Water: South coast Pipeline Wetland and Aquatic Assessment	Procura Management	Kelso, KZN	2016	Wetland/aquatic baseline assessment and impact assessment.
Banana City Housing Development: Ecological Study	SRK	Westville, KZN	2016	Full aquatic/wetland ad terrestrial biodiversity baseline ecological assessment, development of a rehabilitation plan for wetlands, contingency plan, storm water management plan and wetland management and monitoring programme.
Rotenburg Development: Wetland, Aquatic and Terrestrial Ecological Impact Assessment	Green Scene	Shelly Beach, KZN	2016	Full aquatic/wetland ad terrestrial biodiversity baseline ecological assessment, development of a rehabilitation plan for wetlands, contingency plan, storm water management plan and wetland management and monitoring programme.
Blythedale Beach Vegetation Survey and Assessment	Enviro Edge	Blythedale, Kwadukuza, KZN	2016	Terrestrial vegetation survey and impact assessment.
Mandawe Cemetery Aquatic/Terrestrial Ecological Screening	E&D Consulting	Mhlathuze, KZN	2016	Ecological screening assessment (terrestrial and aquatic).
DTP Tradezone 2 Wetland Support	DTPC	La Mercy, KZN	2016	Development of a conceptual storm water treatment wetlands rehabilitation plan for the TradeZone2 development project.

Total PFS Wetland Rehabilitation Plan eSikhaweni	Kantey & Templer	eSikhaweni, KZN	2016	Development of a wetland rehabilitation plan.
Reynolds Farm Wetland and Aquatic Assessment	Reynolds	Ballito, KZN	2016	Wetland and aquatic assessment and impact assessment.
Mngazi River Bridge Aquatic Assessment	Terreco	Eastern Cape	2016	Aquatic assessment (SASS, fish, water quality, IHI) and impact assessment.
Trogon Raw Water Pipeline Construction and Operational Compliance Audit		Tronox KZN Sands	2016	Compliance auditing of the raw water supply pipeline to Fairbreeze Mine during the pre-construction, construction and post-construction phases.
Somkhele Esinyambeni Support	Tendele Mining	Zululand, KZN	2016	Support for wetland assessment.
P449 & P230 culvert replacement wetland & aquatic assessment	RHDHV	Zululand, KZN	2016	Wetland/aquatic baseline assessment and impact assessment.
P237 Road and Walkway Protected Plant Survey	RHDHV	Zululand, KZN	2016	Protected plant survey.
Peat mining court case: wetland support to defense	Middleground Trading	Potchefstroom, North West Province	2016	Provision of wetland technical support and advice to the defense (advocate Barry Roux) for a peat mining court case for the Gerhard Minnebron wetland, located near Potchefstroom.
Mandlazini Waste Water Pipeline: Construction Support	E & D Consulting	Richards Bay, KZN	2015	Providing on-site construction support during the implementation of a waste water pipeline project in the vicinity of wetlands/rivers.
SANRAL: N2 Wildcoast Highway: Aquatic Assessment	SANRAL	Eastern Cape	2015	Delineating and assessing wetlands/riparian areas and undertaking baseline wetland and aquatic for a large/extensive toll road development project. Also involved the assessment of impacts and recommendation of impact management and mitigation measures, the development of an Environmental Management Programme (EMPr) and application for a Water Use License.
DAFF: PCI&S Forestry Audits	DAFF	KZN and Eastern Cape	2015	Auditing compliance with sustainable forestry management for DAFF managed plantations and natural forests.
Dube Tradeport Tradezone Conceptual Wetland Offset Plan	Dube Tradeport Corporation	eThekwini, KZN	2015	Development of a conceptual wetland offset/rehabilitation plan for the TradeZone2 development project.
Waaifontein-Kokstad Wetland Assessment	Egg Piping/Green Scene	Kokstad, KZN	2015	Wetland delineation and functional assessment.
Margate Quarry Wetland Assessment	SRK	Margate, KZN	2015	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts.
Thokoza Road Wetland Assessment	Triplo 4	Mandeni, KZN	2015	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts.
Mpumalanga Waste Centre Vegetation Survey	Enviro Edge	eThekwini, KZN	2015	Baseline terrestrial vegetation survey.
L1524 Road Upgrade Aquatic Assessment	Afzelia	Ladysmith, KZN	2015	Aquatic ecological and biodiversity assessment of river channels and riparian habitat.
P187 Road Upgrade Aquatic Assessment	Afzelia	Ladysmith, KZN	2015	Aquatic ecological and biodiversity assessment of river channels and riparian habitat.

Rushbrook Ecological Rehabilitation Plan	Jeremy Ridl	eThekwini, KZN	2015	Development of an ecological rehabilitation plan and alien plant management plan for a retail centre development.
Buffelsdraai Reforestation Project Terrestrial Biodiversity Assessment	Wildlands Conservation Trust	eThekwini, KZN	2015	Undertaking a follow-up terrestrial biodiversity assessment including vegetation, invertebrates, mammals and avifauna.
Kwadukuza Landfill Wetland Delineation	Metamorphosis	eThekwini, KZN	2015	Wetland delineation study.
Harrismith Railway Terminals Habitat Screening	GIBB	Harrismith, Free State	2015	Ecological habitat screening assessment (including terrestrial and freshwater habitat and vegetation).
York Farm Cultivation Wetland Assessment	JEC	New Hanover, KZN midlands	2015	Wetland delineation, functional assessment and recommendation of aquatic buffer zones for a mixed-crop cultivation project.
Buffelsdraai Weir Construction: Aquatic Biomonitoring	eThekwini Municipality	eThekwini, KZN	2015	Aquatic biomonitoring for the construction of a flow- guaging weir for the Buffelsdraai Landfill Reforestation Project, including SASS, fish, diatoms and water chemistry monitoring/analysis.
Aquatic Habitat Assessment for the L2842, D991 and L723 Causeways	Kerry Seppings (KSEMS)	eThekwini, KZN	2015	Aquatic habitat impact assessment (rivers and wetlands) for proposed upgrading of culverts in eThekwini.
Erf 6936 Pinetown Wetland Assessment	Isolendalo	eThekwini, KZN	2015	Wetland delineation, functional assessment and recommendation of aquatic buffer zones for a residential development project.
Maclear WWTW Wetland Assessment	Terreco	Maclear, Eastern Cape	2015	Wetland assessment to inform the decommissioning of WWTW oxidation ponds and provide input into site rehabilitation.
GJ Crookes Pedestrian Bridge: Aquatic Assessment	KSEMS	Scottburgh, KZN	2015	Wetland and river assessment including delineation, functional assessment, impact assessment and rehabilitation/management planning.
Kwadukuza Landfill Wetland Functionality Assessment	Metamorphosis Environmental Consultants	KwaDukuza, KZN	2015	Wetland and river assessment including delineation, functional assessment, impact assessment and rehabilitation/management planning.
Hilton-Mondi Desktop Wetland Mapping	Guy Nicolson Consulting	Hilton, KZN	2015	Desktop wetland mapping and risk screening assessment to inform WULA.
P112 Wetland Rehabilitation Plan	Isolendalo	lxopo, KZN	2015	Wetland assessment including delineation, functional assessment, impact assessment and rehabilitation/management planning.
Birdhaven Wetland Assessment and Rehab Plan	Graham Projects	KwaDukuza, KZN	2015	Wetland assessment induding delineation, functional assessment, impact assessment and rehabilitation/management planning.
Ntatshana Road & Bridge Aquatic Assessment	RHDHV	KZN	2015	Wetland and river assessment including delineation, functional assessment, impact assessment and rehabilitation/management planning.
R102 Interchange Wetland Assessment	RHDHV	eThekwini, KZN	2015	Wetland and river assessment including delineation, functional assessment, impact assessment and rehabilitation/management planning.
Dunkirk Clubhouse Risk Screening Assessment	Triplo 4	KwaDukuza, KZN	2015	Desktop wetland mapping and risk screening assessment to inform WULA.
Lovu Landfill Wetland/Aquatic Assessment	Metamorphosis Environmental Consultants	eThekwini, KZN	2015	Wetland and river assessment including delineation, functional assessment, impact assessment and rehabilitation/management planning.
Paddock Wetland- Aquatic Assessment	Buist Investments	Port Shepstone, KZN	2015	Wetland and river assessment including delineation, functional assessment, impact assessment and rehabilitation/management planning.
Birdhaven Country Estate Wetland Rehab Plan	Graham Projects	KwaDukuza, KZN	2015	Wetland and river assessment including delineation, functional assessment, impact assessment and rehabilitation/management planning.
R102 Interchange Vegetation Assessment	RHDHV	eThekwini, KZN	2015	Terrestrial vegetation survey and impact assessment.
Birdhaven Surface Water Monitoring Plan	Graham Projects	KwaDukuza, KZN	2015	Surface water monitoring and plan development

ZAC Mine: Wetland Assessment	ZAC	Ulundi, KZN	2015	Wetland and river assessment including delineation, functional assessment, impact assessment and rehabilitation/management planning.
Eastern Cape Bridges Aquatic Assessment	EIMS	Port St Johns/Mthatha, Eastern Cape	2014	Aquatic (river assessment) for bridge development. Included baseline assessment of riparian habitat, vegetation, invertebrates and fluvial geomorphology, impact assessment and recommendations to manage/mitigate ecological impacts.
Keystone Industrial Park: Aquatic Assessment	Rokwil	Hammarsdale, KZN	2014	Wetland/river ecological assessment to inform a large Industrial Park development.
Lions River Pipeline: Wetland Assessment	Synergistics	Howick, KZN	2014	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts associated with a proposed bulk water pipeline project.
Dassenhoek waste water pipeline terrestrial ecological assessment	SRK Consulting	Dassenhoek, eThekwini, KZN	2014	Assessing terrestrial biodiversity for a proposed waste water pipeline development project. Involved undertaking baseline ecological assessments, the assessment of impacts and recommendation of impact management and mitigation measures.
Dassenhoek waste water pipeline aquatic ecological assessment	SRK Consulting	Dassenhoek, eThekwini, KZN	2014	Delineating and assessing wetlands/riparian areas for a proposed waste water pipeline development project. Involved undertaking baseline ecological assessments, the assessment of impacts and recommendation of impact management and mitigation measures.
Bhambayi Phase 1 Housing Project: Aquatic Assessment	GIBB	eThekwini, KZN	2014	Delineating and assessing wetlands/riparian areas for a proposed housing upgrade development project. Involved undertaking baseline ecological assessments, the assessment of impacts and recommendation of impact management and mitigation measures.
eThekwini Alien Invasive Plant Survey and Prioritization Project	eThekwini Municipality	eThekwini, KZN	2014	Survey of over 120 eThekwini Municipality managed Reserves and Open space areas in terms of invasive alien plant species status and densities. Development of a prioriitisation model for prioritising open spaces for alien clearing/management operations.
Weenen Piggery: Wetland Assessment	Janet Edmonds Consulting	Weenen, KZN	2014	Delineating and assessing wetlands for a proposed piggery development project. Involved undertaking baseline ecological assessments, the assessment of impacts and recommendation of impact management and mitigation measures.
Queensburgh Wetland Assessment	NS Environmental	Queensburgh, eThekwini, KZN	2014	Delineating and assessing wetlands/riparian areas for a proposed housing development project. Involved undertaking baseline ecological assessments, the assessment of impacts and recommendation of impact management and mitigation measures.
eThekwini Alien Invasive Plants: Parks and Nurseries Compliance Audits	eThekwini Municipality	eThekwini, KZN	2014	Compliance auditing of 10 selected nurseries and 10 selected parks/gardens managed by eThekwini Municipality with regards to CARA/NEMBA alien plant requirements.
RBIDZ: Phase 2A: Wetland and Biodiversity Assessment	GIBB	Richards Bay, KZN	2014	Delineating and assessing wetlands/riparian areas and undertaking baseline wetland and biodiversity assessments for a proposed Industrial Development. Also involved the assessment of impacts and recommendation of impact management and mitigation measures.
Foxhill wetland assessment	Triplo 4	Ballito, KZN	2014	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts.
Birdhaven Wetland Delineation	Graham Projects	Ballito, KZN	2014	Wetland delineation study.
Kloof extension aquatic assessment	SRK Consulting	KwaDabeka, eThekwini, KZN	2014	Delineating and assessing wetlands/riparian areas for a proposed housing upgrade development project. Involved undertaking baseline ecological assessments, the assessment of impacts and recommendation of impact management and mitigation measures.
Froes Estate: Terrestrial Biodiversity	K2M Consulting	Queensburgh, eThekwini, KZN	2014	Terrestrial biodiversity of a coastal forest ecosystem for a planned housing estate development.

Assessment				
La Maine Farm	Infuse Projects	Shakaskraal, KZN	2014	Wetland delineation study.
Wetland Delineation Dunkirk Forest Clubhouse: Wetland Assessment	Triplo 4	Ballito, KZN	2014	Wetland delineation study. Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts.
Dokodweni Forest Survey	Triplo 4	Dokodweni, KZN	2014	Vegetation survey of a coastal dune forest system.
Wood Limpus Road Sewer Line: Aquatic Assessment	GIBB	Queensburgh, eThekwini, KZN	2013	Riparian delineation, functional assessments, impact assessment and recommendations to manage/mitigate impacts associated with a proposed waste water pipeline project.
Ugu Biodiversity Sector Plan	Ezemvelo KZN Wildlife	Ugu District, KZN	2013	Development of a Biodiversity Sector Plan for the Ugu District Municipality on behalf of Ezemvelo KZN Wildlife.
Mpophomeni Pipeline Wetland Assessment	Synergistics	Mpophomeni, KZN	2013	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts associated with a proposed bulk water pipeline project.
Copesville Wetland Assessment	Green Door Environmental	Msunduzi, KZN	2013	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts associated with a proposed bulk water pipeline project.
RBIDZ Ecological Sensitivity Mapping	Thorn EX	Richards Bay, KZN	2013	Desktop ecological sensitivty mapping of aquatic and terrestrial features to inform development planning within the Richards Bay Industrial Development Zone.
Woodburn Wetland Delineation	Bokamoso	Msunduzi, KZN	2013	Wetland delineation study.
Thina River Dams Desktop Survey	Green Door Environmental	Thina River, Eastern Cape	2013	Desktop study aimed at assessing the viability of a number of sites for a proposed dam on the Thina River. Involved sensitivty mapping and analyses of aquatic and terrestrial features and comparison of the various options to inform site selection.
Darvill waste water treatment works upgrade: terrestrial biodiversity assessment	Umgeni Water/Afzelia	Msunduzi, KZN	2013	Terrestrial biodiversity assessment to inform WWTW upgrade project.
Darvill waste water treatment works upgrade: wetland assessment	Umgeni Water/Afzelia	Msunduzi, KZN	2013	Wetland delineation and functional/impact assessment to inform WWTW upgrade project.
Somkhele Coal Mine Expansion Project: Terrestrial and Aquatic Biodiversity Assessment	Ground Water Consulting Services	Mthubathuba, KZN	2013	Surface water and terrestrial biodiversity assessment for large proposed coal mining areas in Zululand. Involved undertaking baseline ecological assessments, sensitivity mapping, the assessment of impacts and recommendation of impact management and mitigation measures.
Richards Bay Temporary Coal Storage Facility: Wetland Assessment	GIBB	Richards Bay, KZN	2013	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts associated with a proposed coal storage facility at the Port of Richards Bay.
Mandlazini Waste Water Pipeline: Wetland Assessment	E & D Consulting	Richards Bay, KZN	2013	Delineating and assessing wetlands/riparian areas for a proposed waste water upgrade project. Involved undertaking baseline ecological assessments, the assessment of impacts and recommendation of impact management and mitigation measures.
Buffelsdraai Reforestation Monitoring	Wildlands Conservation Trust	eThekwini, KZN	2013	Forest surveys (plots) and analyses to determine the effectiveness of reforestation activities.
RAMSAR Wetland	DEAT	Various across SA	2012	Development of management plans for a selection of

Management Plans				RAMSAR wetlands of international importance across South Africa.
Edendale Tannery Wetland Rehabilitation & Management Plan	Jeffares & Green	Msunduzi, KZN	2012	Development of a wetland management and rehabilitation plan at Edendale Tannery.
Ntibane Water Abstraction: Specialist Aquatic Assessment	Environment and Rural Solutions	Kokstad, KZN	2012	River assessment (water quality, vegetation survey and fluvial geomorphology) to inform a water abstraction project.
Lusikisiki Wetland Assessment	Terreco	Lusikisiki, Eastern Cape	2012	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts associated with a proposed waste water treatment works development project.
Richards Bay Wetland Assessment: Extension of Eastern Arterial Road to RBM	GIBB	Richards Bay, KZN	2012	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts associated with a proposed road upgrade development project.
Mthatha Airport Expansion: Wetland Assessment	Ndodana Consulting Engineers	Mthatha, Eastern Cape	2012	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts associated with the proposed upgrading of Mthatha Airfield.
Ludidi Wetland Delineation	Sigwela & Associates	Eastern Cape	2012	Wetland delineation study.
Zululand Anthracite Colliery mine, aquatic assessment to inform WULA	Ground Water Consulting Services	Ulundi, KZN	2012	Wetland/river assessment to inform Water Use License Application (WULA) for a coal mine in Zululand.
Siyathuthuka housing development: Wetland Management Plan	Makhosi Nyoka & Associates	Richmond, KZN	2012	Development of a wetland management plan to inform housing development in a rural area.
Kokstad N2 Interchange Wetland Assessment	GIBB	Kokstad, KZN	2012	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts associated with a proposed road interchange development project.
Ladysmith-Spionekop dam Bulk Water Pipeline Terrestrial Ecological Assessment	Jeffares & Green	Ladysmith, KZN	2012	Terrestrial ecological assessment, impact assessment and recommendations to manage/mitigate impacts associated with a proposed bulk water pipeline project.
Ladysmith-Spionekop dam Bulk Water Pipeline Wetland Assessment	Jeffares & Green	Ladysmith, KZN	2012	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts associated with a proposed bulk water pipeline project.
Marburg Asphalt Plant: wetland and forest assessment	Green Door Environmental	Port Shepstone, KZN	2012	Wetland delineation and functional/impact assessment as well as assessment of coastal forest habitat to inform an Asphalt plant development project.
Mdloti Waste Water Pipeline EIA: Specialist Aquatic Assessment	GIBB	Mount Moreland, eThekwini, KZN	2011	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), vegetation survey, biodiversity assessment, impact assessment and recommendations to manage/mitigate impacts associated with a proposed waste water pipeline development project in the vicinity of the Mdloti River and Mount Moreland wetlands.
eThekwini Reforestation Strategy	Wildlands Conservation Trust	eThekwini, KZN	2011	Study aimed at identifying sites to form part of eThekwini Municipality's reforestation programme and including preliminary rehabilitation strategy and recommendations.
Ntiszwa Weir Water Supply Scheme: Specialist Aquatic Assessment	Environment and Rural Solutions	Kokstad, KZN	2011	Annual bio-monitoring programme to monitor the status of rivers affected by a water supply scheme in the Eastern Cape. Included baseline monitoring of a range of indicators of river health and functioning,

				including riparian and instream vegetation assessments (VEGRAI), invertebrates and fish and fluvial geomorphology assessments. Impacts and appropriate mitigation measures were also assessed.
Eastern Cape SANRAL N2 Road Bypasses	Terreco	Eastern Cape	2011	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts associated with a proposed road development project.
Paddock Wetland Assessment	Greene Land: Land & Planning Law	Port Shepstone, KZN	2011	Wetland delineation, functional assessments (WET- Health, WET-Ecoservices), impact assessment and recommendations to manage/mitigate impacts associated with a proposed housing development project.
La Mercy Wetland Delineation	LRI	eThekwini, KZN	2011	Wetland delineation study.
Western Cape Wetland Verification Assessment	NCC Environmental	Beaufort West, Western Cape	2011	Wetland delineation study.
King Shaka International Airport/Dube Trade Port – Aquatic Biomonitoring Programme	ACSA/DTP	eThekwini, KZN	2010	Annual bio-monitoring programme to monitor the status of rivers and wetlands downstream of the King Shaka International Airport development. Included monitoring using a range of indicators of river/wetland health and functioning, including WET- Health, WET-Ecoservices, vegetation assessments, topographic surveys/profiles, invertebrates and fish and water chemistry/quality sampling and analyses during the contruction phase of the KSIA.
King Shaka International Airport/Dube Trade Port – Construction Auditing	ACSA/DTP	eThekwini, KZN	2010	Monthly independent environmental compliance audits of the KSIA/DTP project during the construction phase.
Lesotho Highlands Development Agency – Katze dam review of flow release policy	LHDA	Lesotho	2009	Desktop and field study aimed at updating flow release policies at Katze dam from the perspective of protecting and maintaining the fluvial geomorphological template and processes in the downstream river system.
Mzimkhulu River Reserve determination	DWAF	Mzimkhulu River, KZN	2009	River reserve determination for the Mzimkhulu River (fluvial geomorphology component).
Baynes tributary canalisation scheme: specialist fluvial geomorphology assessment	Terratest	Msunduzi, KZN	2009	Assessment of fluvial geomorphology for a stream rehabilitation project.
NeWater project: quantifying the benefits from wetlands in Orange/Senqu River basin	NeWater (EU funded)	Gauteng	2008	Baseline wetland assessment for the Klip River and Rietspruit wetland systems to inform the economic valuation of wetland ecosystem goods and benefits.



herewith certifies that

Adam Teixeira-Leite

Registration number: 400332/13

is registered as a

Professional Natural Scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003 (Act 27 of 2003) in the following fields(s) of practice (Schedule 1 of the Act)

> **Environmental Science Ecological Science**

Effective 25 September 2013

Expires 31 March 2019



President

Report

Executive Director