



Corlie Steyn

Principal Consultant: Environmental Sustainability

Qualifications

Master of Philosophy Environmental and Geographical Science, 2013

Bachelor of Arts (Honours) Geography, 1997

Bachelor of Laws Law, 1995

Professional Registrations and Memberships

Member, International Association for Impact Assessment (IAIA), 2025

Environmental Practitioner, Environmental Assessment Practitioners Association of South Africa (EAPASA), 2020

Years Experience

27 Years (1998 - 2025)

Summary

Corlie is a professionally registered senior environmental practitioner specialising in environmental consulting for various disciplines. She has most recently been involved in civil, roads and gas power related projects. She has extensive experience in environmental management and research projects related to climate change. She also has experience in the evaluation and review of environmental impact assessments (EIAs); advising on law enforcement and environmental matters; managing public participation processes (PPPs), including in-depth interviews with stakeholders; chairing workshops and presenting final reports to government departments and civil society stakeholders. Corlie is a registered member of the International Association for Impact Assessment South Africa (IAIAsa) and the Environmental Assessment Practitioners Association of South Africa (EAPASA). She is a part-time lecturer at the Nelson Mandela University's (NMU's) Department of Nature Conservation. She holds an MPhil degree in Environmental Management from the University of Stellenbosch, South Africa. She also holds an Honours Degree in Geography, a BA Degree and a Higher Education Diploma, all obtained from the University of Pretoria in South Africa.

Employment record

2011/01 - Date Zutari, Senior Environmental Practitioner

2007/01 - 2021/11 Nelson Mandela Metropolitan University (NMMU), Lecturer

2007/01 - 2010/12 Zutari, Environmental Practitioner

2008/01 - 2010/01 Provincial Department of Environmental Affairs & Development Planning, Principal Environmental Officer

2008/01 - 2010/01 Wildlife and Environment Society of South Africa (WESSA), Environmental Practitioner

2003/01 - 2006/01 Department of Environmental Affairs and Development Planning, Environmental Officer

2000/01 - 2003/01 High School Pro-Arte Alphen Park, High School Teacher in Geography and French

1999/01 - 1999/12 East Brook and Forest Gate, London, UK, High School Teacher in Geography and French

1998/01 - 1998/12 Macrocon Civil Engineers, Assistant

Relevant experience

Provision of professional engineering consultancy services: Macassar WasteWater Treatment Works, 32 ML/d Capacity extension, South Africa, City of Cape Town Water & Sanitation, 2021/11 - 2027/12

Zutari was appointed to upgrade and extend the Macassar wastewater treatment works from a capacity of 48 ML/day to 120 ML/day. The project includes conceptual design, planning, preliminary and detailed design, tender documentation and evaluation, and construction supervision.

Construction of a treated effluent pipeline for the City of Cape Town, South Africa, City of Cape Town Water & Sanitation, 2024/03 - 2026/10

The City of Cape Town (CoCT) is managing its growing water demand by implementing various projects, as outlined in its Treated Effluent Strategy and Masterplan. One such project involves expanding the Macassar treated effluent pump station and network, with a new pump station and network proposed for Zandvliet to supply treated effluent to users and parts of the Macassar network. A 6.3 km pipeline was designed to convey 5ML/day from Zandvliet WWTW to Macassar WWTW. Zutari was appointed to analyze options for the pipeline crossing the Eerste River, considering environmental and financial factors, and to handle detailed design, procurement, and construction monitoring. The project aims to ensure sustainable water use and improve irrigation efficiency.

194C/2020/21: Atlantis Aquifer new water programme (NWP), South Africa, City of Cape Town Water & Sanitation, 2021/10 - 2026/10

The City of Cape Town is enhancing its water supply by developing wellfields that draw from the Atlantis Aquifer, aiming to bolster resilience against droughts. They have engaged Zutari to review the current water treatment process at Witzands Water Treatment Works (WTW) and to oversee the further development of the abstraction wellfield. Additionally, the managed aquifer recharge scheme is being reviewed and upgraded.

Xhariep pipeline feasibility study, South Africa, Department of Water & Sanitation RSA, 2022/12 - 2026/03

The feasibility study included evaluating infrastructure, optimising pipeline routes and materials, assessing existing infrastructure, and considering hydropower potential. It also involved analyzing impacts on current systems, evaluating water quality and treatment needs, and producing preliminary design drawings for the pipeline, treatment works, and associated components.

Feasibility study for upgrade of Kloof Nek Water Treatment Plant residue disposal system, South Africa, City of Cape Town Water & Sanitation, 2023/05 - 2025/01

Zutari was tasked to conduct a feasibility study on the upgrade of the residue disposal system of Kloof Nek Water Treatment Plant.

Table Mountain Group (TMG) aquifer groundwater resilience project, South Africa, City of Cape Town Water & Sanitation, 2017/10 - 2024/12

The project involves developing boreholes in three geographic areas of the Table Mountain Group (TMG) aquifer to augment the water supply to Cape Town. The project also involved an environmental component, since the site is in a UNESCO world heritage site.

Design of Mizingani seawall and promenade, Phase IIA, Tanzania, Tanzania Ministry of Finance, 2013/11 - 2023/09, Environmental Consultant

The Revolutionary Government of Zanzibar, through its Zanzibar Urban Services Project, appointed Zutari to lead a consortium of six consultancy companies for the design of the 340m long vertical seawall, with a 5m wide sea reclamation, along Mizingani Road. Zutari's scope of work included detailed design of the seawall and promenade, tender documentation, contract administration, construction monitoring as well as the review of the environmental and social management plan (ESMP).

Botswana-South Africa (BOSA) transmission project, South Africa, Southern African Power Pool, 2016/04 - 2023/09, Environmental Consultant

The Botswana-South Africa Transmission Interconnector Project (BOSA) scope, funded by DBSA and KfW, entails the construction of approximately 260 km of 400 kV transmission line between the proposed 400/132 kV Watershed B substation in South Africa and the Isang 400/220 kV substation in Botswana as well as the design of the associated terminal equipment within these substations. Zutari was appointed to provide consultancy services comprising a scoping study, feasibility study and advisory services.

Bridging study for Clanwilliam Dam, South Africa, Department of Water & Sanitation RSA, 2017/06 - 2022/02, Environmental Consultant

Zutari was commissioned to conduct a study and provide recommendations on the bulk conveyance infrastructure necessary for the equitable distribution of additional water resulting from the raising of Clanwilliam Dam, with a focus on new areas for agricultural development

Seawind Terminal Saldanha technical due diligence, South Africa, Meali Investment Holdings (Pty) Ltd, 2020/12 - 2021/08, Environmental Consultant

Zutari conducted a technical due diligence project for a buyer of a dry port terminal, inspecting buildings, pavements, and rail infrastructure. The assessment included recommendations for improvements and a risk evaluation, influencing the purchase price and benefiting the buyer financially.

Namakwa solar energy development, South Africa, Veld Solar One (Pty) Ltd, 2016/08 - 2021/03, Environmental Consultant

Responsible for compilation of documents, public participation coordination, stakeholder engagement, drafting of environmental management programme (EMPr) and rehabilitation plan, coordination of specialists, budget management and invoicing for the proposed Veld PV South energy facility on the farm Haramoep in the Namakwa District Municipality.

Materials supply for gravel roads, South Africa, WC PG Dept Transport and Public Works TB, 2015/02 - 2020/03, Environmental Consultant

Zutari was appointed for engineering geology, environmental studies, materials source identification, as well as project management for the development, improvement and management of materials supply for the maintenance of gravel roads.

Engineering services for the development of Newcastle Power Station, Australia, AGL Energy Limited (AGL, 2018/01 - 2020/01, Senior Environmental Practitioner

The project entailed an environmental impact assessment (EIA) and design for the proposed gas power station at Tomago in the Newcastle area of New South Wales (NSW) to provide approximately 250 megawatts (MW) of firming capacity to the National Electricity Market (NEM). Responsible to summarise the biodiversity development assessment, noise and vibration assessment, visual assessment, electromagnetic fields (EMF) assessment, bushfire assessment, plume rise assessment, fire safety and groundwater assessments.

Luapula River Hydroelectric Scheme, Congo, The Democratic Republic of the Congo, Southern African Power Pool, 2018/07 - 2019/05, Environmental Consultant

Responsible for the compilation of the legislation chapter of the screening report and compilation of the terms of reference (ToR) for the ESIA as well as report writing.

Working for Wetlands environmental planning and compliance, South Africa, Department of Environmental Affairs (DEA), 2016/11 - 2019/04, Environmental Consultant

Zutari, in association with GroundTruth, was appointed to undertake the planning and approval processes for the Working for Wetlands Programme for the period 2017-2019. The programme has been mandated to rehabilitate damaged wetlands and to protect pristine wetlands.

Kleinberg Dam Scheme Phase 1, South Africa, Hex Valley Water Use Association, 2013/08 - 2018/10, Environmental Consultant

Zutari was appointed to manage the Phase 1 upgrade of the Kleinberg Dam Scheme, overseeing designs and contract supervision for a gravity line (DN800 to DN200) that transfers water from existing abstraction works to a 50 Ml storage dam and farmers' irrigation points.

Saldanha Gas-to-Power Plants, South Africa, 2016/02 - 2018/03, Environmental Consultant

Responsible for project management, team liaison and coordination, compilation of documents, public participation coordination, stakeholder engagement, drafting of environmental management programme (EMPr) and rehabilitation plan, coordination of specialists, budget management and invoicing. Also responsible for assisting with the compilation of the two scoping reports.

Preliminary design and contract documentation for the development of Lonsdale Street Sewer Stage 2A, Australia, City West Water, 2018/01 - 2018/01, Senior Environmental Practitioner

The project involved the preliminary design of Stage 2A (Lonsdale Street) for issue to a design and construct tender. Stage 2A works are understood to consist of a 1 400 mm internal diameter glass reinforced plastic (GRP) sewer running from an invert level of 0.48 mAHd at Spencer Street (CH 0) to an invert level of approximately 2.50 mAHd at Elizabeth Street (CH 900). A total length of 900 m. A 600 mm diameter augured pipe will be used to connect the Elizabeth Street shaft to the existing ELZ manhole within Elizabeth Street. Stage 2A will connect directly into Stage 1 works at Spencer Street. Responsible for the compilation of a risk report and review of all applicable legislation. The report had to identify key risks and issues and propose mitigation measures to support the project approvals where required, the site management plan and environmental management and compliance throughout the design and construction.

Mossel Bay NUSP participatory based planning support, South Africa, Dept of Human Settlements RSA, 2015/08 - 2017/11, Environmental Consultant

Zutari was appointed to support informal settlement upgrading in Mossel Bay through the National Upgrading Support Programme. Their work included creating plans for 18 settlements, sustainable livelihoods programmes, community capacity building, and a skills transfer report. This project builds on previous assistance provided to Mossel Bay.

Hotazel Solar Park, South Africa, Juwi Renewable Energies (Pty) Ltd, 2016/05 - 2017/10, Environmental Consultant

Responsible for compiling the BAR.

Road materials supply strategy, South Africa, WC PG Dept Transport and Public Works TB, 2008/06 - 2017/07, Environmental Consultant

Responsible for report compilation, corresponding with key stakeholders and specialists and undertaking the public participation process (PPP).

Implementation capacity consultant for the DTPW, South Africa, WC PG Dept Transp&PublicWorks, 2013/08 - 2016/09, Environmental Consultant

The Department of Transport and Public Works' Works Education Facilities (WEFs) have experienced a significant increase in the annual budget allocated to the education facilities over the past few years. As a result, the directorate has been significantly stretched in their capacity to deliver projects. Zutari was appointed to provide implementation capacity consulting services to mobilise resources in a wide range of disciplines to support the various project leaders and technical staff.

Mulilo photovoltaic (PV) expansion, South Africa, Mulilo Renewable Energy (MRE), 2013/03 - 2016/06, Environmental Consultant

Responsible for the compilation of the environmental management plan (EMP).

Unifying and standardising of highway engineering practices, United Arab Emirates, Abu Dhabi Department of Transport, 2009/08 - 2016/04, Environmental Consultant

Zutari, as the client's representative, led the standardisation of highway engineering practices in the UAE. The project involved unifying design standards including geometric, pavement and geotechnical design manuals. The project aimed to optimise highway performance and minimise costs. Responsible for reviewing the manual, completing comment sheets and writing the environmental chapter.

Preparation of National Integrated Catchment Management and Rural Infrastructure Development Guidelines, Malawi, Malawi Min Water Dev & Irrigation, 2014/01 - 2016/04, Environmental Consultant

The project focuses on improving land and water management to benefit ecosystems and livelihoods, while addressing poverty and environmental degradation in Malawi. It entailed the preparation of National Integrated Catchment Management and Rural Infrastructure Development Guidelines, the collection and a review of existing guidelines, and the compilation of consolidated national catchment management guidelines, targeted at community and village level. Responsible for the compilation of the Permaculture Chapter in the guidelines.

Construction of a second bridge across the River Niger, Nigeria, Nigeria Sovereign Investment Authority (NSIA), 2014/01 - 2016/01, Environmental Practitioner

The Federal Government of Nigeria proposed to construct a second bridge across the River Niger between Onitsha and Asaba and selected the Julius Berger-AIIM Consortium as the preferred bidder. Zutari was appointed on behalf of AIIM to undertake an environmental and social impact assessment (ESIA) required in terms of the Environmental Decree No 86 of 1992, in accordance with the International Finance Corporation (IFC) guidelines, which included a resettlement action plan (RAP). The aim was to ensure regulatory compliance with the Nigerian environmental legislation and achieve the highest possible compliance with Equator Principles (EPs). Responsible for the compilation of the environmental management plan (EMP) for the proposed bridge.

Second bridge on the River Niger, Nigeria, Nigerian Sovereign Investm Authority, 2014/05 - 2014/12, Environmental Consultant

The Federal Government of Nigeria, through the Federal Ministry of Works, wants to construct a second bridge across the River Niger between Onitsha and Asaba. Zutari was appointed on behalf of AIIM to do an environmental and social impact assessment required in terms of the Environmental Decree No 86 of 1992, in accordance with the International Finance Corporation guidelines. This is to ensure regulatory compliance with the Nigerian environmental legislation and to achieve the highest possible compliance with Equator Principles.

Water augmentation study for the Bitou Municipality, South Africa, Bitou Municipality, 2009/10 - 2014/03, Environmental Consultant

The proposed Wadri 1E Dam scheme was for the augmentation of the bulk water supply to the Plettenberg Bay area. Zutari's project scope focussed on the Wadri 1E off-channel dam. The project consisted of a detailed contour survey of the dam site (including some site clearing), and the preparation of a survey plan by a contracted surveyor.

Solid waste cost estimate report for George Local Municipality, South Africa, George Local Municipality, 2012/01 - 2014/01, Environmental Practitioner

The project entailed the compilation of a solid waste cost estimate report for George Local Municipality, including the Uniondale site. Responsible for site visits, public participation and compilation of the report.

Solid waste cost estimate reports, South Africa, Various, 2012/01 - 2014/01, Environmental Practitioner

The project entailed the compilation of a solid waste cost estimate report for the George Local Municipality as well as the Hantam Local Municipality and six sites within the district. Responsible for site visits, public participation and compilation of the reports.

Revision of the solid waste cost estimate report for George Local Municipality, South Africa, George Local Municipality, 2013/01 - 2014/01, Environmental Practitioner

The project entailed the revision and compilation of the solid waste cost estimate report for George Local Municipality done during 2012.

Planning, design, and environmental, project and risk management of the Working for Wetlands (SANBI) programme, South Africa, SA National Biodiversity Institute, 2011/08 - 2013/09, Environmental Consultant

Zutari was appointed in 2010 for a three-year project cycle to undertake the planning, design, environmental management, project management and risk management of the South African government's Working for Wetlands Programme (SANBI). Responsible for the compilation of a basic assessment report (BAR), public-private partnership (PPP) and application form.

2013 cost provision for future rehabilitation of landfills, South Africa, Various CPTZAEAD, 2013/05 - 2013/07, Environmental Consultant

Future rehabilitation costs for landfill and solid waste sites are calculated per GRAP 17. If licenses are missing, 1998 Department of Water Affairs guidelines are used. Costs include environmental processes, civil works, and post-decommissioning monitoring, with survey data informing the final design.

Environmental impact assessment (EIA) for three photovoltaic (PV) facilities near De Aar, South Africa, Mulilo Renewable Projects Developments (Pty) Ltd, 2011/09 - 2013/03, Environmental Consultant

The project entailed an environmental impact assessment (EIA) for three photovoltaic (PV) power facilities to be constructed near De Aar in the Northern Cape generating 75-150 MW, 100-135 MW, and 19 MW respectively. Responsible for the compilation of an environmental report and a screening report as per criteria of the independent power producer (IPP) programme as well as an environmental management plan (EMP) for the proposed solar energy facility on Annex Du Plessis Dam Farm.

Proposed wind and solar/photovoltaic (PV) energy facility near Springbok, South Africa, South Africa Mainstream Renewable Power Developments, 2012/01, Environmental Practitioner

The project involved environmental impact assessments (EIA) for a 750 MW wind energy facility and a 250 MW solar photovoltaic energy facility on farms near Springbok. Responsible for report compilation, corresponding with key stakeholders and specialists and undertaking the public participation process (PPP).

Cost estimate for solid waste sites in the George and Uniondale municipal areas, South Africa, Mubesko Africa, 2014/01, Environmental Practitioner

This project entailed the compilation and public-private partnership (PPP) involved with the updated cost estimate for the solid waste sites in George and Uniondale.

Languages

Afrikaans, English, French

By my signature below I certify the correctness of the information above and my availability to undertake this assignment.

Corlie Steyn



Signed by Corlie Steyn, Corlie.Steyn@zutari.com

07/02/2025 14:03:41(UTC+02:00)

Signature of Staff Member

Date: 07 February 2025

