

**CURRICULUM VITAE
JO-ANNE THOMAS**

Profession : Environmental Consultant
Specialisation : Environmental Management; Strategic environmental advice;
Environmental compliance advice & monitoring; Environmental Impact
Assessments; Policy, strategy & guideline formulation; Project
Management; General Ecology
Years experience : Seventeen (17) years in the environmental field

KEY RESPONSIBILITIES

Provide technical input for projects in the environmental management field, specialising in Strategic Environmental Advice, Environmental Impact Assessment studies, environmental permitting, public participation, Environmental Management Plans and Programmes, environmental policy, strategy and guideline formulation, and integrated environmental management. Key focus on integration of the specialist environmental studies and findings into larger engineering-based projects, strategic assessment, and providing practical and achievable environmental management solutions and mitigation measures. Responsibilities for environmental studies include project management; review and manipulation of data; identification and assessment of potential negative environmental impacts and benefits; review of specialist studies; and the identification of mitigation measures. Compilation of the reports for environmental studies is in accordance with all relevant environmental legislation.

Undertaking of numerous environmental management studies has resulted in a good working knowledge of environmental legislation and policy requirements. Recent projects have been undertaken for both the public- and private-sector, including compliance advice and monitoring, electricity generation and transmission projects, various types of linear developments (such as National Road, local roads and power lines), waste management projects (landfills), mining rights and permits, policy, strategy and guideline development, as well as general environmental planning, development and management.

SKILLS BASE AND CORE COMPETENCIES

- Project management for a range of projects
- Identification and assessment of potential negative environmental impacts and benefits through the review and manipulation of data and specialist studies
- Identification of practical and achievable mitigation and management measures and the development of appropriate management plans
- Compilation of environmental reports in accordance with relevant environmental legislative requirements
- External and peer review of environmental reports & compliance advice and monitoring
- Formulation of environmental policies, strategies and guidelines
- Strategic and regional assessments; pre-feasibility & site selection
- Public participation processes for a variety of projects
- Strategic environmental advice to a wide variety of clients both in the public and private sectors
- Working knowledge of environmental planning processes, policies, regulatory frameworks and legislation

CURRICULUM VITAE

GABRIELE WOOD

Profession : Public Participation and Social Consultant
Specialisation : Public Participation Process Implementation
Years experience : 8 years

KEY RESPONSIBILITIES

Specific responsibilities as a Public Participation and Social Consultant include professional execution of public participation consulting for a variety of projects. This includes managing and coordinating public participation processes for Environmental Impact Assessments (EIA).

SKILLS BASE AND CORE COMPETENCIES

- Qualitative and Quantitative Social Research
- Social Assessment (Stakeholder and Social Analysis)
- Public participation process implementation, monitoring and evaluation
- Facilitation (Focus Groups, Community Meetings, Interest Group Meetings, Public Meetings, Public Open Days, Workshops, Forums, Committees, etc.)
- Stakeholder Management
- Community Needs Assessment
- Relocation Facilitation
- Project Administration
- Minute Taking
- Report Writing

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- B. Hons. Anthropology (Cum Laude): University of Johannesburg (2004 – 2005)
- B.A. Psychology: University of Johannesburg (2002 – 2004)

Courses:

- South African Advertising Research Foundation (SAARF) living Standards Measure (LSM) Training (2010).
- Certificate in Focus Group Moderation Skills, Market Research for Africa (2007)
- Prestige Diploma in Public Relations: Allenby Campus Boksburg now Damlin College (2001)

EMPLOYMENT

May 2012 – Current: Savannah Environmental (Pty) Ltd: Public Participation and Social Consultant

March 2007 – April 2012: NMA Effective Social Strategists (Pty) Ltd: Assistant Project Manager : Public Participation and Social Research

January 2005 – March 2007 (Part-time): University of Johannesburg: Department of Anthropology and Development Studies: Student Tutor and Research Assistant

PROJECT EXPERIENCE

Current projects include:

- Blackwood Solar Energy Facility - EIA (for VentuSA Energy)
- Amakhala Kopleegte Substation and Kopleegte – Poseidon Power Line – BA (for Cennergi)
- Garob – Kronos Power Line – BA (for juwi Renewable Energies)
- Nojoli Power Line and Substation – BA (for ACED)
- Umbani Coal-fired Power Station – EIA (for ISS Global Mining)
- Thabametsi Coal-fired Power Station – EIA (for GDF SUEZ Energy Southern Africa)
- Abengoa Upington CSP Phase 2 and 3 – EIA (for Abengoa Solar)
- Pofadder Renewable Energy Facilities – EIA (for Mainstream Renewable Power South Africa)
- Cuprum-Burchell and Burchell to Moidraai – BA (for Eskom)
- Wolmaransstad Municipality Solar Energy Facility – EIA (for Bluewave)
- Blackwood Power Line and Substation – BA (for VentuSA Energy)
- Kotulo Tsatsi CSP and PV Solar Park – EIA (for Exheredo)
- Expansion of the Sekoko Colliery – EIA (for Sekoko Resources)
- Transalloys Coal Fired Power Station – EIA (for Transalloys)
- Castle Wind Energy Facility – EIA (for juwi Renewable Energies)
- Karreebosch Wind Energy Facility – EIA (for G7 Renewable Energies)
- Tatuka PV Solar Energy Facility – EIA (for Eskom)
- Majuba PV Solar Energy Facility – EIA (for Eskom)
- Lethabo PV Solar Energy Facility – EIA (for Eskom)
- Iziduli Power Line and Substation – BA (for Windlab)
- Kathu CSP Watercourse Crossings and Power Line – BA (for GDF Suez)
- Karreebosch Wind Energy Facility – EIA (for G7 Energies)
- SolarReserve Kotulo Tsatsi Energy CSP Facilities – EIA (for SolarReserve & Kotulo Tsatsi Energy)
- Grootdrink Solar PV Energy Facility – EIA (for Africoast Engineering)
- Byromate Biomass Power Generation Facility – EIA (for Energuys)

WASTE MANAGEMENT LICENSES

- Integrated NEMA and Waste Management License application for the Thabametsi Coal Fired Power Station, Limpopo
- Integrated NEMA and Waste Management License application for the Umbani Coal Fired Power Station, Mpumalanga
- Integrated NEMA and Waste Management License application for the Transalloys Coal Fired Power Station, Mpumalanga
- Waste Management License application for South Deep for Goldfields, Gauteng
- Waste Management License application for Medupi PS pollution control dams, Limpopo
- Waste Management License application for REDISA Visserhok Tyre Depot, Western Cape
- Waste Management License application for REDISA Witbank Tyre Depot, Mpumalanga

EDUCATION AND PROFESSIONAL STATUS

Degrees:

B.Sc Earth Sciences, *University of the Witwatersrand, Johannesburg*, 1993

B.Sc Honours in Botany, *University of the Witwatersrand, Johannesburg*, 1994

M.Sc in Botany, *University of the Witwatersrand, Johannesburg*, 1996

Courses:

Environmental Impact Assessment, *Potchefstroom University*, 1998

Environmental Law, *Morgan University*, 2001

Professional Society Affiliations:

Professional Natural Scientist (Registration No 400024/00).

EMPLOYMENT

2006 - Current: Director of Savannah Environmental (Pty) Ltd. Independent specialist environmental consultant

October 1997-November 2005: Bohlweki Environmental (Pty) Ltd: Senior Environmental Scientist; Environmental Management and Project Management

January to July 1997: Junior Science Teacher, Sutherland High School, Pretoria

PROJECT EXPERIENCE

Current projects include:

Wind Energy Projects

- Project manager for the EIA undertaken for the Kleinsee wind energy facility and associated infrastructure, Northern Cape (for Eskom)
- Project manager for the EIA undertaken for the Aberdeen wind energy facility and associated infrastructure, Eastern Cape (for Eskom)
- Project manager for the EIA undertaken for the Project Blue wind energy facility and associated infrastructure, Northern Cape (for Diamond Wind)
- Project manager for the EIA undertaken for the Swellendam wind energy facility and associated infrastructure, Western Cape (for IE Swellendam)
- Project manager for the EIA undertaken for the Moorreesburg wind energy facility and associated infrastructure, Western Cape (for IE Moorreesburg)
- Project manager for the EIA undertaken for the proposed Spitskop East wind energy facility, Eastern Cape Province (for Renewable Energy Resources Southern Africa)
- Project manager for the EIA undertaken for the proposed EXXARO West Coast wind energy facility and associated infrastructure at a site within the Western Cape (for EXXARO Resources)
- Project manager for the EIA undertaken for the proposed Oyster Bay wind energy facility, Eastern Cape Province (for Renewable Energy Resources Southern Africa)
- EIA and EMP for the proposed wind energy facility and associated infrastructure at a site within the Western Cape (for Eskom Generation)
- EIA and EMP for the proposed wind energy facility and associated infrastructure at a site near Hopefield, Western Cape Province (for Umoya Energy)
- Project manager for the proposed Klipheuwel/Dassiesfontein wind energy facility and associated infrastructure at a site within the Overberg area of the Western Cape (for BioTherm Energy)

- Project manager for the proposed Suurplaat wind energy facility and associated infrastructure at a site within the Western Cape (for Moyeng Energy)
- Project manager for the proposed West Coast One wind energy facility and associated infrastructure at a site within the Western Cape (for Moyeng Energy)
- Project manager for the proposed Rheboksfontein wind energy facility and associated infrastructure at a site within the Western Cape (for Moyeng Energy)

Solar Energy Projects

- Project manager for the EIA and EMP for two PV sites within the Western and Northern Cape Provinces (for INCA Energy)
- Project manager for the Basic Assessment and EMP for PV site within the Northern Cape Province (for INCA Energy)
- Project manager for the Basic Assessment and EMP for a PV site near Rustenburg, North-West Province (for Momentous Energy)Project manager for the EIA and EMP for the proposed Project Ilanga (125MW CSP facility) near Upington, Northern Cape Province (for Ilangethu Energy)
- Project manager for the EIA and EMP for two PV sites within the Northern Cape Province (for MedEnergy Global)
- Project manager for the Basic Assessment and EMP for PV sites within 4 ACSA airports within South Africa (for ACSA PV)
- Project manager for the EIA and EMP for the proposed Waterberg PV plant, Limpopo Province (for Thupela Energy)

Coal-fired Power Station Projects

- Project manager for the EIA undertaken for the proposed Independent power Producer (IPP) Coal-fired Power Station and associated infrastructure near Lephalale within the Waterberg District Municipality of the Limpopo Province
- Project manager for the EIA undertaken for the proposed Umbani Coal-fired Power Station and associated infrastructure near Kriel, Mpumalanga Province
- Project manager for the EIA undertaken for the proposed Ruukki Coal-fired Power Station and associated infrastructure near Ogies, Mpumalanga Province

Gas-fired Power Station Projects

- Project manager for the EIA and EMP for the proposed conversion of the existing Open Cycle Gas Turbine (OCGT) Ankerlig Power Station (located in Atlantis Industria) to a Combined Cycle Gas Turbine (CCGT) power station, and the associated 400 kV transmission power line between Ankerlig Power Station and the Omega Substation (for Eskom Generation)
- Project manager for the EIA and EMP for the proposed conversion of the existing Open Cycle Gas Turbine (OCGT) Gourikwa Power Station (located near Mossel Bay) to a Combined Cycle Gas Turbine (CCGT) power station, and the associated 400 kV transmission power line between Gourikwa Power Station and the Proteus Substation (for Eskom Generation)

Power lines

- Project manager for the EIA and EMP for the proposed Mokopane Integration Project, Limpopo Province (for Eskom Transmission)
- Project manager for the proposed transmission lines from the Koeberg-2 Nuclear Power Station site, Western Cape Province (for Eskom Transmission)
- Project manager for the proposed Tshwane strengthening project, Phase 1, Gauteng Province (for Eskom Transmission)
- Project manager for the EIA and EMP for the proposed Kyalami Strengthening Project, Gauteng Province (for Eskom Transmission)
- Project manager for the EIA and EMP for the proposed Steelpoort Integration Project, Limpopo Province (for Eskom Transmission)

Compliance Advice and Due Diligence

- First annual Environmental and Social Monitoring Report for the Upington Airport 10MW PV Plant, Northern Cape Province
- Compliance advice for Financial Close of the Ilanga CSP Facility, Northern Cape Province
- Compliance advice for Financial Close of West Coast One Wind Energy Facility, Western Cape Province
- Compliance advice for Financial Close of Tsitsikamma Wind Energy Facility, Eastern Cape Province
- Compliance advice for Financial Close of Upington Solar Facility, Northern Cape Province
- Environmental Due Diligence of a wind energy facility in the Western Cape on behalf of EDPR Renewables
- Environmental Due Diligence of a wind energy facility on the West Coast of the Western Cape on behalf of ILF&S

CURRICULUM VITAE
TEBOGO MAPINGA

Profession : Senior Environmental Consultant for Savannah Environmental Consultants
Specialisation : Environmental Management
Years of experience : 8 years

KEY RESPONSIBILITIES

- Project Management and client liaison;
- Report writing and review;
- Compliance monitoring and audit reporting;
- Development of Proposals; and
- Staff monitoring.

SKILLS BASE AND CORE COMPETENCIES

- Report Writing, drafting proposals and tenders;
- Negotiating skill;
- Problem solving;
- Financial management and marketing;
- Understanding of all Environmental Legislation (NEMA, NEM:BA, NEM:WA, NEM:AQA, NEM:PAA, etc) and all other relevant legislation;
- Ability to work independently and in a team;
- Verbal, written and good presentation skills;
- Time management and workload management;
- Facilitation skills; and
- Organizational, planning and analytic skills.

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- *Bsc Degree: The University of Limpopo, 2006; and*
- *Honours in Environmental Management: University of South Africa (in progress).*

Courses:

- Computer Literacy Course: University of Limpopo, 2005; and
- Environmental Impact Assessment Training: University of Pretoria, 2012.

Professional Society Affiliations:

- **N/A**

EMPLOYMENT HISTORY

Environmental Practitioner/ Project Manager: Phaki Phakanani Environmental Consultants (January 2007 - March 2008) Tasks include:

- Training of junior staff;
- Client Liaison;

- Project co-ordination and facilitation;
- Managing specialists;
- Report writing and presentations;
- Compiling Environmental Impact Assessment Reports (Basic and Scoping/EIA Report); and
- Facilitating the Public Participation Process.

Environmental Manager: SEF (1 April 2008 – 30 February 2009) Tasks include:

- Compilation of Environmental Scoping Reports, Plan of Study, Environmental Impact Assessments, Basic Assessments and Environmental management plans;
- Co-ordination of the public participation process;
- Project management, including specialists and other team members;
- Development of terms of reference, project proposals and tenders; and
- Client liaison.

Environmental Project Manager: SEF (1 March 2009 until 31 April 2010) Tasks include:

- Compilation of Environmental Scoping Reports, Plan of Study, Environmental Impact Assessments, Basic Assessments and Environmental management plans;
- Co-ordination of the public participation process;
- Project management, including specialists and other team members;
- Development of terms of reference, project proposals and tenders;
- Client liaison;
- Marketing; and
- Financial Management of projects.

Environmental Officer Specialist production: Department of Environmental Affairs (1 April 2010 until 1 June 2013) Tasks include:

- Process EIA applications submitted to DEA within the stipulated legislated time frames;
- Implement the SID and ERP EIA guideline;
- Provide technical input into Appeal Response Report's (ARR's);
- Support Regulatory Services with compliance monitoring and enforcement;
- Implement DEA and Public Entity EIA forums; and
- Provide technical input into CD: IEA correspondence.

Environmental Scientist: GIBB Engineering and Science (Mega Projects) (1 June 2013- 31 March 2014) Tasks include:

- Re-writing the Revised Draft EIR Version 2 Eskom Nuclear-1 EIA; and
- Liaison with the client and specialists.

PROJECT EXPERIENCE

ENVIRONMENTAL IMPACT ASSESSMENTS AND PUBLIC PARTICIPATION

- Wesley Peddie Power Line Basic Assessment (2015)
- Pofadder Wind and Solar Energy Facilities (2014-2015);
- Pofadder Power Line Basic Assessment Application (2014-2015)
- Castle Wind Energy Facility (2014-2015)
- Spitskop Wind Energy Facility (2014-2015);
- Bobididi Solar Facility-Environmental Screening (2014);
- Son Citrus Solar Energy Facility (2014);
- Nuclear- 1 EIA (2013);
- Langkuil Industrial Development, 2008 (Environmental Manager and Project Manager);
- Township Development in Reitfontein, 2008/2009;
- Upgrading of the BP Golf Course, 2008;
- Construction of the BP Soshanguve VV Filling Station, 2008;
- Construction of the BP Soshanguve ZZ Filling Station, 2008;
- Shell Filling Stations(Project Manager and Client Liaison), 2008/ 2009:
- Watloo Filling Station
- Chantelle Filling Station
- M2 East Filling Station
- Orlando Filling Station
- Equestria Willowglen Filling Station
- President Park Filling Station
- Capital Park;
- Eskom- Komati Water Augmentation, 2008;
- Rainbow Junction Residential Development, 2008/ 2009;
- Township Development in Delmore Park Extension 7, 2008/ 2009;
- West Rand District Municipality- Bulk Water Supply 2009;
- West Rand District Municipality Air Quality Assessment;
- Lonmin K4 Shaft Mine Upgrading;
- Westlake Residential Development;
- Air Quality Management Plan;
- Montana Spruit Upgrading;
- Palm Ridge Township Development;
- HM Pitjie Roads;
- Vlaakplat S24G Application (Mokgale City Local Municipality);
- Rangeview Ext 2 S24G Application (Mogale City Local Municipality);
- Construction of Khetho Bridge, Greater Giyani Local Municipality, 2007;
- Demolition and Relocation of Malamulele High School, 2007;
- Construction of Malamulele Shopping Complex, 2007;
- The Subdivision of land in Ellisrus, 2007;
- Construction of the Senwabarwane Filling Station, 2007;

- Residential Development in Tlapeng Village, 2007;
- Township Development in Maphosa Village, 2007;
- Establishment of a Piggery in Mogalakwena Local Municipality, 2007;
- Establishment of two Piggeries in Elias Motsoaledi Local Municipality, 2007;
- Establishment of a Piggery in Modimolle Local Municipality, 2007;
- Township Development in Rietfontein, 2007;
- Public Participation and Section 24G Application for the National Taxi Scrapping Project, 2007;
- Construction of a Shopping Complex in Zebediela, 2007;
- Establishment of a Guest House (ECA application), 2008;
- Establishment of a Waste Management Depot in Rustenburg, 2008; and
- Establishment of a Waste Management Depot in Tzaneen and Nkowa-Nkowa, 2008.

CURRICULUM VITAE

Jared Padavattan

Profession : Environmental Assessment Practitioner
Specialisation : Compliance Monitoring (including Construction Health and Safety Management) and Environmental Assessment Practitioner
Years of experience : 3 Years

KEY RESPONSIBILITIES AS ENVIRONMENTAL CONTROL OFFICER (ECO)

Specific responsibilities as an Environmental Control Officer include; the independent monitoring of construction activities, reporting of environmental incidences and non-compliances to the responsible contractor and the Department of Environmental Affairs, ensuring the projects' Environmental Management Programme (EMP) and Environmental Authorisation (EA) conditions and objectives are being met. ECO also ensures compliance is being met with regards to permits and licenses under DAFF and DWS.

KEY RESPONSIBILITIES AS EAP

- Client and Authority liaison.
- Prepare terms of reference and appoint technical specialists.
- Compilation of environmental technical reports such as environmental management Programmes and environmental impact assessment.
- Water Use Licence applications.
- Compilation of Integrated Water Use License Applications and Integrated Waste Water Management Plans.

SKILLS BASE AND CORE COMPETENCIES

- Environmental Audits and Compliance Monitoring.
- Environmental Audit reports.
- Environmental reporting to LTA, developer and Owners' Engineering team.
- Overseeing and providing input on rehabilitation activities.
- Identification of protected and specially protected species.
- Facilitation (Contractors meetings)
- Reviewing and Assessment (Contractors environmental method statements, project documentation, MSDS etc.)
- Environmental Awareness Training.
- Client and authority liaison.
- Water Use License compliance monitoring.
- Ensuring conditions stated in permits and licenses related to the project are adhered too (SAHRA, DWS, DAFF and local environmental departments).
- Reviewing of specialist reports for input on site activities.
- Construction Health and Safety Management

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- B.Sc. Hons. Environmental Management: UNISA, (2010-2011)
- B.Sc. Marine Biology: University of Kwa-Zulu Natal, (2007 - 2009)

Courses:

- SAMTRAC (*Cum Laude*), NOSA (2015)
- 2014 Construction Regulations (2015)
- ASHEPP (Applying Safety, Health and Environmental Principles and Procedures), NOSA (2013)
- Introduction to SAMTRAC and Hazard Identification and Risk Assessment, NOSA (2013)

Professional affiliation:

- SACPCMP Construction Health and Safety Manager: Registration currently under review

EMPLOYMENT

- *July 2014 – Current:* Savannah Environmental (Pty) Ltd: Environmental Control Officer and Environmental Assessment Practitioner
- *January 2014 – July 2014:* GCS (Pty) Ltd, Kloof, Durban, Kwa-Zulu Natal: Environmental Assessment Practitioner

PROJECT EXPERIENCE**ENVIRONMENTAL CONTROL OFFICER:**

- Khi Solar One: Concentrated Solar Thermal Tower Plant – ECO (Abengoa Solar).
- Xina Solar One: Concentrated Solar Thermal Plant – ECO (Abengoa Solar).

ENVIRONMENTAL ASSESSMENT PRACTITIONER:**ENVIRONMENTAL IMPACT ASSESSMENTS**

- Proposed Rohill business Estate, Durban North, Kwa-Zulu Natal (2014): EIA
- Zululand Anthracite Colliery (Pty) Ltd, Northern Kwa-Zulu Natal (2014): S24G application
- Bondit Right Trading (Pty) Ltd, Marianhill, Kwa-Zulu Natal (2014): Milkyway Shopping centre, Basic assessment project initiation
- Kangra Coal (Pty) Ltd, Near eMkhondo, Mpumalanga (2014): Extension of existing Maquasa East Discard Dump, EIA for DEA and DMR
- Eskom Holding SOC Ltd: Proposed Majuba PV Solar Energy Facility near Amersfoort, Mpumalanga (2015)
- FG Emvelo (Pty) Ltd (2015): Proposed construction of the Additional Karoshoek CSP Facilities, Northern Cape

WATER USE LICENCES:

- Zululand Anthracite Colliery (Pty) Ltd, Northern Kwa-Zulu Natal (2014): IWULA.
- Airports Company South Africa (Pty) Ltd, La Mercy (2014): King Shaka International Airport, IWULA.
- Barberry Group cc, Northern Kwa-Zulu Natal (2014): Talana loop railway siding, IWWMP.
- Zinoju Coal (Pty) Ltd/ Forbes Coal (Pty) Ltd, near Dundee, Kwa-Zulu Natal (2014): Amendment to IWWMP for Magdalena Colliery.
- Kangra Coal (Pty) Ltd, near eMkhondo, Mpumalanga (2014): Kangra Longridge mine closure, assisting with wetland health and delineation.
- Moyeng Energy (Pty) Ltd (2015): Gemini wind farm.

ENVIRONMENTAL MANAGEMENT PLAN:

- Kotulo Tsatsi Energy and SolarReserve (2015): Construction of the SolarReserve Kotulo Tsatsi Concentrated Solar Plant 2, Northern Cape.

ENVIRONMENTAL AUDITING:

- Macambini Water Pipeline audit, Northern Kwa-Zulu Natal (2014).

Kimberg, Peter - Curriculum Vitae

330 Percheron Road, Beaulieu Estate, Midrand | +27 (82) 417 9191

peter@thebiodiversitycompany.com

Personal Information

Date of birth: 1975/11/06

Languages: Fluent in English & Afrikaans

Marital status: Married

ID Number: 7511065211087

Career Objectives

Ensuring development of earth's resources whilst adhering to a policy of no net-loss of biodiversity

Work Experience

March 2015 – current | 50% Shareholder in The Biodiversity Company | Independent Biodiversity Consultancy

- Providing specialist biodiversity consulting services to the private sector.

January 2014 – February 2015 | Self-employed as Hydrocynus Consulting | Independent Aquatic and Biodiversity Consultant

- Providing specialist aquatic and biodiversity consulting services to the private sector.

August 2013 – December 2013 | Golder Associates Africa | Discipline Lead Ecological Services

In addition to specialist responsibilities (below):

- Leading innovation and business development within division;
- Providing in-house advisory services to project opportunities in Africa including resource allocation, project complexity, location and project risks.

March 2009 – September 2013 | Golder Associates Africa | Divisional Leader Ecology

- Management of all aspects pertaining to running of division including financial performance, strategic planning, human resource management and health & safety management;
- Quality control & review of ecology division deliverables;
- Project management and client interaction;
- Compilation of integrated biodiversity reports from various specialist ecological disciplines;
- Specialist studies of aquatic ecosystems including high level/risk baseline and impact assessments and compilation of complex management plans.

July 2007 – February 2009 | Golder Associates Africa | Group Leader Aquatics

- Management of aquatics group including group coordination and scheduling;
- Project management and client interaction;

- Specialist studies of aquatic ecosystems including baseline and impact assessments and compilation of management plans.

February 2004 – June 2007 | Ecosun cc. | Senior Aquatic Consultant

- Specialist assessments of aquatic ecosystems.

January 2003 – December 2003 | Incomati Tigerfish Action Group (iTag) | Field Researcher

- Assessment of migratory movements and habitat use of Tigerfish (*Hydrocynus vittatus*) using radio telemetry in the Crocodile and Komati Rivers, Kruger National Park.

January 1997 – December 1998 | Legacy Hotel Group | Field guide

- Leading guided game drives and bush walks in the Pilanesberg National Park, NW Province.

Education

M.Sc. | Ongoing to be completed 2016 | Rhodes University

Assessment of the impact of the alien invasive fish species *Micropterus salmoides* (Largemouth Bass) on indigenous fish communities in the Groot Marico River catchment, North-West Province, South Africa.

B.Sc. Honours | 2002 | University of Johannesburg (UJ)

Aquatic Health: Baseline assessment of aquatic ecosystems in the Mankwe River, Pilanesberg National Park, North-West Province.

B.Sc. | 1999 - 2001 | University of Johannesburg (UJ)

Majors: Zoology & Botany

Skills & Abilities

Specialist Skills

- Extensive experience as aquatic specialist with high competency in the following:
 - Baseline assessments of aquatic ecosystems including:
 - Detailed characterization of aquatic habitats;
 - Collection of water & sediment samples and interpretation of laboratory results;
 - Sampling of aquatic biota including periphyton, diatoms, zooplankton & phytoplankton, benthic macroinvertebrates & fish;
 - Identification of African fish species;
 - Compilation of critical habitat reports;
 - Compilation of impact assessment reports in line with IFC Performance Standard 6;
 - Compilation of biodiversity reports;
 - Compilation of alien invasive species management plans;
 - Ecological risk assessment.
- Worked in a wide variety of environments in 15 African countries including South Africa, Namibia, Angola, Botswana, Mozambique, Madagascar, Lesotho, Zambia, Democratic Republic of Congo, Central African Republic, Tanzania, Togo, Guinea, Liberia & Mali.

Management

- Financial management & planning;
- Strategic planning including compiling business plans;
- Human resource management;
- Health & safety management.

Communication

- Presentation skills - ability to confidently explain complex scientific principles to a wide variety of audiences.

Recent Project Experience (full list available on request)

- **Société des Mines de Fer de Guinée (SMFG), Mt. Nimba; Guinea** : Aquatic baseline, critical habitat and impact assessment of aquatic ecosystems associated with the proposed iron ore mine at Nimba World Heritage Site, Guinea;
- **New Liberty Gold Mine, Liberia**: Aquatic baseline and impact assessment report for input into project ESIA report;
- **Scantogo Cement Project ,Togo**: Ecological specialist assessment report for inclusion into project ESIA report;
- **Riversdale Benga, Tete, Mozambique**: Scoping, baseline and impact assessment of aquatic ecosystems in the Zambezi and Revúboè Rivers associated with proposed coal mining activities;
- **Hillside Aluminum, Richards Bay, South Africa**: Receptor characterization component of Source, Pathway, Receptor (SPR) report;
- **Royal Vopak, Heidelberg, South Africa**: Sensitive biodiversity and ecosystem assessment; and
- **Exxaro, Belfast, South Africa**: Update of Belfast Wetland offset and compilation of additional impact assessment reports.

Training & Workshops

Banks and Biodiversity Training Course: Equator Principles Association, Citibank, WWF and BBOP, (2013);

Workshop to discuss the mainstreaming of biodiversity considerations into the strategic development of the Waterberg Coal Corridor: National Biodiversity and Business Network, (2013);

Ecological Risk Assessment Workshop: presented by W. Landis (Washington University) at North-West University, (2013);

Introduction to the Upstream Petroleum Industry – Oil and Gas School: Golder Associates 3 day training seminar, (2011);

Manager Excellence: Golder Associates Africa 4 day training course, (2010);

S21(c) and (i) Water Uses – Comprehensive Training: Directorate Water Abstraction and Instream Use, (2009); and

Monitoring contaminant levels in freshwater fish for bioaccumulation surveys and human consumption: University of Johannesburg & Water Resource Commission (WRC), (2005).

Publications

Kimberg PK, DJ Woodford, H Roux & OLF Weyl (2014). Species-specific impact of introduced largemouth bass *Micropterus salmoides* in the Groot Marico Freshwater Ecosystem Priority Area, South Africa. African Journal of Aquatic Science, DOI: 10.2989/16085914.2014.976169

PK Kimberg, DJ Woodford, OLF Weyl, C Hui, DM Richardson, TP Msezane, KA van der Walt, ER Swartz, CT Chimimba, T Zengeya & BR Ellender (2014). Understanding the unintended spread and impact of alien and invasive fish species – development of management guidelines for South African inland waters. Report to the Water Research Commission. WRC Report No. 2039/1/14.

References

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Danie Otto | Biophysical Lead | **Digby Wells Consulting (Pty) Ltd.** | C: [+27] (82) 399 9315 | E: danie.otto@digbywells.com |

Chris Fell | Environmental & Social Management Plan Team | **Mozambique LNG Project** | C: [+27] 72 3476050 | E: cfell@rsrisksolutions.com |

CV for ENVIRONMENTAL ASSESSMENTS

Dr Rob Simmons

Synopsis: 57 year-old ecologist and ornithologist, with 30 year's research experience in Namibia and South Africa. Permanent Resident in South Africa. Currently I am Research Associate within the FitzPatrick Institute's Centre of Excellence, UCT.

Formerly employed in the Namibian Ministry of Environment and Tourism (MET) as the country's ornithologist, specializing in biodiversity issues. Schooled in England (Honours: Astrophysics), Canada (MSc: Biology) and South Africa (PhD: Zoology).

I have worked in all parts of Namibia, first as Wetlands Biologist, then Ornithologist, specialising on raptorial birds, shorebirds, flamingos, terns, endemic species and inventories of Namibia's wetlands. Endemic species have been intensively studied in the escarpment and specialized collaborative studies have been undertaken with Cambridge, Oxford, Uppsala, Stanford, Edinburgh and Sheffield Universities. I have authored and co-authored 100 papers and 60 popular articles, contributed to 9 books or proceedings, and written an Oxford-published book on raptors in 2000. I have recently (2015) finished Namibia's first Red Data book on birds to be published in May.

I live and work in South Africa and have undertaken over 20 impact assessments in the last 20 years. I was part of the advisory board team for BAWESG of EWT and Birdlife SA Birds.

1. SPECIFIC EXPERIENCE :

(i) **Ecological study of the Cunene River mouth** – As wetlands biologist, I headed a 1991 survey team comprising MET staff, that assessed the avifauna of the river's lagoon over 3 months during peak (March - May) and low flow (November) periods. We concurrently recorded all other fauna in the area and undertook simple mapping and river sampling. Results published *Madoqua* 18:163-180 (1993)

(ii) **National surveys of Namibian wetland birds** - Coordinated avifaunal assessments of about 80 wetlands throughout Namibia twice a year, as part of an Africa-wide programme (1990-2003).

(iii) **Sandwich Harbour avifauna** - A project begun 25 years ago by ministry staff, and continuing to this day, assessing natural changes in geomorphology and wetland area (using Global Positioning System technology) and the resultant changes in wetland avifauna. Random survey plots used to count birds.

Major nationwide monitoring projects:

Population monitoring of Namibian endemics - In conjunction with Edinburgh University initiated a project to determine densities and thus overall population numbers of all 16 Namibian endemic birds. Populations are now the best known for any species in Namibia. Published *Biological Conservation* 1996 and incorporated into the new Namibian Red Data book (Simmons et al. 2015).

Damara Tern status –In 1992 I devised a stratified random survey of the entire 1450 km-long coast of Namibia, revolutionised our estimates of the species' status. Published *Ibis* 1998. Current publication with students on effects of protection on population size and success.

Black Harrier status – From 2000 - present monitoring threatened Black Harriers throughout South Africa, using satellite tags to follow migration and research with MSc and PhD students.

Impact Assessments undertaken

My consultancy work experience covers 20 years in Namibia and South Africa.

- birds impacted by a proposed Haib copper mine near the Orange River (1994)

- siting of proposed Lüderitz wind farm prior to formal assessments for NamPower (1997);
- coastal birds impacted by new “pocket-beach” diamond mines within the Diamond Area of the Sperrgebiet for Namdeb (Enviro-science (2002);
- impacts to birds along powerlines across the Namib Desert (Windhoek-Walvis Bay) for Nampower (2000).
- assessment of water abstraction scheme from Karst System on wetlands and birds near Tsumeb (2003) (Jessica Hughes).
- impacts to birds from proposed powerlines between Windhoek-Rehoboth (2005) for NamPower
- bird impacts on a proposed powerline south-east of the Waterberg Plateau Park (assisted Chris van Rooyen with specialist knowledge -2006)
- impact of uranium mine at Valencia, Khan River, Namibia (Aug 2007, Feb 2008)
- Impact on birds of proposed shooting range at Faure Police site, Western Cape (2009)
- Impact on birds of new airport in Caledon, Western Cape (2009)
- Wind farm (x5) bird assessments (with Andrew Jenkins) in Western Cape (2010-2011)
- Power lines-bird interactions Redlinghuys, West Cape (ERM- 2009)
- Coastal birds impacted by re-mining diamonds at E-Bay, Sperrgebiet, Namibia (Pisces-2010)
- Impact of golf course development at the River Club, Observatory (2010)
- Wind farm assessments at Gansbaai/Walker Bay (Savannah-2011)
- Wind farm assessments on the west coast at Kleinsee and Koingnaas (Savannah – 2011)
- EIA report for Kleinsee 300 and Kleinsee Blue projects (Savannah-2011)
- EIA report and pre-construction monitoring of birds in Namaqualand and Springbok (Mulilo – 2012)
- EIA report and pre-construction for birds on a wind farm at Konstabel (Mainstream 2011).
- Pre-construction monitoring of birds at the Witteberg (Karoo) wind farm site – (Anchor Environmental 2011-2012)
- Pre-construction monitoring of birds at a Richtersveld wind farm site (EnBW -2012-2013)
- Pre-construction monitoring of birds at Happy Valley (E Cape) wind farm site (EDP Renewables -2013-2014).

Recent papers and academic background can be found at:

<http://www.fitzpatrick.uct.ac.za/docs/whatsnew.html>

Red data book and conservation work at:

www.nnf.org/na/RAPTORS/raptors_pges/conservation.htm

Papua New Guinea work at:

http://www.natural-research.org/news/PNG_harrier.htm



CURRICULUM VITAE: D G Paterson

SURNAME: PATERSON
FIRST NAME(S): David Garry
KNOWN AS: Garry
DATE OF BIRTH: 25-08-1959 in Bellshill, Scotland
NATIONALITY: South African
I.D. No.: 5908255258088
LANGUAGE PROFICIENCY: English, Afrikaans (both fluent), French (poor)
MARITAL STATUS: Married, one son

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Republic of South Africa
TEL.: (012) 310 2601
083 556 2458
FAX: (012) 323 1157

E-MAIL ADDRESS: garry@arc.agric.za

ACADEMIC QUALIFICATIONS:

- Matriculated: 1976, Dalziel High School, Motherwell, Scotland
- BSc (Hons) Geography, 1980, University of Strathclyde, Glasgow, Scotland
- MSc (Soil Science) *cum laude*, 1998, University of Pretoria
- PhD (Soil Science), 2014, University of Pretoria

PROFESSIONAL CAREER:

- 1981-1987: Soil Scientist: Soil and Irrigation Research Institute, Pretoria
- 1987-1992: Senior Soil Scientist: Soil and Irrigation Research Institute, Pretoria
- 1992-present: Senior Soil Scientist: ARC-Institute for Soil, Climate & Water

FIELDS OF SPECIALITY AND COMPETENCE:

- Soil classification and mapping
- Soil interpretations
- Soil survey project management
- Environmental assessment
- Soil survey and land capability course presentation
- Ground penetrating radar

PUBLICATIONS (see attached list):

- Three refereed articles (S.A. Journal of Plant and Soil)
- Nine Congress papers/posters
- S.A. Soil Classification (1991) (Member of working group)
- Seven 1:250 000 Land Type Maps
- Three Land Type Memoirs
- More than 200 soil survey reports and/or maps

COURSES COMPLETED:

- Course in Project Management (University of Stellenbosch)
- Course in Junior Personnel Management (Dept of Agriculture)
- Course in Handling of Grievances and Complaints (Dept of Agriculture)
- Course in Marketing (ARC-ISCW)
- Course in National Qualifications Framework Assessment, ARC-CO
- Training Course in Ground Penetrating Radar (GSSI, USA)
- Introduction to ArcGIS 8, GIMS, 2004

PROFESSIONAL STATUS:

- Registered Natural Scientist: Soil Science (SA National Council for Natural Scientific Professions) – registration number 400463/04
- Member of South African Soil Classification Working Group, 1990-present
- Convenor of South African Soil Classification Working Group, 2013-
- Member of Soil Science Society of South Africa (1982-present)
- President of Soil Science Society of South Africa (2005-2007)
- Member of South African Soil Survey Organisation (2000-present)
- Council Member of South African Soil Survey Organisation (2002-2003)
- Member of International Erosion Control Association
- Scientific Referee, S.A. Journal for Plant and Soil
- External Examiner, University of Pretoria, University of Witwatersrand, University of Venda

AWARDS:

Best article on Soil Science, South African Journal for Plant and Soil, 2011

MISCELLANEOUS:

- Editor, Soil Science Society newsletter, 1993-present
- Member, Clapham High School (Pretoria) Governing Body 1998-2002
- Member, Northern Gauteng Football Referee's Association
- Committee Member, Rosslyn Golf Club (Club Champion 2002 and 2007)

INTERESTS:

Sport, especially golf and soccer; wildlife; reading; music

REFEREES:

Mr T.E. Dohse, ARC-Institute for Soil, Climate and Water.
Tel: 082 324 5389

Prof Robin Barnard, ARC-Institute for Soil, Climate and Water
Tel: 012 310 2549

Prof M.C. Laker (retired), (012) 361-2900; 082 785 5295

PUBLICATIONS LIST:

Refereed Articles:

BÜHMANN, C., KIRSTEN, W.F.A., PATERSON, D.G. & SOBCZYK, M.E., 1993. Pedogenic differences between two adjacent basalt-derived profiles. 1. Textural and chemical characteristics. *S. Afr. J. Plant & Soil*, 10: 155-161

BÜHMANN, C., KIRSTEN, W.F.A., PATERSON, D.G. & SOBCZYK, M.E., 1994. Pedogenic differences between two adjacent basalt-derived profiles. 2. Mineralogical characteristics. *S. Afr. J. Plant & Soil*, 11: 5-11

PATERSON, D.G. & LAKER, M.C., 1999. Using ground penetrating radar to investigate spoil layers in rehabilitated mine soils. *S. Afr. J. Plant & Soil*, 16:131-134.

PATERSON, D.G., BÜHMANN, C., PIENAAR, G.M.E. & BARNARD, R.O., 2011. Beneficial effects of palm geotextiles on inter-rill erosion in South African soils and mine dam tailings: a rainfall simulator study. *S. Afr. J. Plant & Soil*, 28: 181-189.

PATERSON, D.G. & BARNARD, R.O., 2011. Beneficial effect of palm geotextiles on inter-rill erosion in South African soils. *S. Afr. J. Plant & Soil*, 28: 190-197.

BHATTACHARRYA, R., FULLEN, M.A., BOOTH, C.A., KERTESZ, A., TOTH, A., SZALAI, Z., JAKAB, G., KOZMA, K., JANKAUSKAS, B., JANKAUSKIENE, G., BÜHMANN, C., PATERSON, D.G., MULIBANA, N.E., NELL, J.P., VAN DER MERWE, G.M.E., GUERRA, A.J.T., MENDONCA, J.K.S., GUERRA, T.T., SATHLER, R., BEZERRA, J.F.R., PERES, S.M., ZHENG YI, LI YONGMEI, TANG LI, PANOMTARANICHAGUL, M., PEUKRAI, S., THU, D.C., CUONG, T.H., TOAN, T.T., 2011. Effectiveness of biological geotextiles for soil and water conservation in different agro-environments. *Land Degradation and Development*, 22: 495-504.

FULLEN, M.A., SUBEDI, M., BOOTH, C.A., SARSBY, R.W., DAVIES, K., BHATTACHARRYA, R., KUGAN, R., LUCKHURST, D.A., CHAN, K., BLACK, A.W., TOWNROW, D., JAMES, T., POESEN, J., SMETS, T., KERTESZ, A., TOTH, A., SZALAI, Z., JAKAB, G., JANKAUSKAS, B., JANKAUSKIENE, G., BÜHMANN, C., PATERSON, D.G., MULIBANA, N.E., NELL, J.P., VAN DER MERWE, G.M.E., GUERRA, A.J.T., MENDONCA, J.K.S., GUERRA, T.T., SATHLER, R., BEZERRA, J.F.R., PERES, S.M., ZHENG YI, LI YONGMEI, TANG LI, PANOMTARANICHAGUL, M., PEUKRAI, S., THU, D.C., CUONG, T.H., TOAN, T.T., JONSYN-ELLIS, F., SYLVA, J.T., COLE, A., MULHOLLAND, B., DERALOVE, M., CORKILL, C. & TOMLINSON, P., 2011. Utilising biological geotextiles: introduction to the Borassus Project and global perspectives. *Land Degradation and Development*, 22: 453-462.

SMETS, T., POESEN, J., BHATTACHARRYA, R., FULLEN, M.A., SUBEDI, M., BOOTH, C.A., KERTESZ, A., SZALAI, Z., TOTH, A., JANKAUSKAS, B., JANKAUSKIENE, G., GUERRA, A.J.T., BEZERRA, J.F.R., ZHENG YI, PANOMTARANICHAGUL, M., BÜHMANN, C. & PATERSON, D.G., 2011. Evaluation of biological geotextiles for reducing runoff and soil loss under various environmental conditions using laboratory and field data. *Land Degradation and Development*, 22: 480-494.

NETHONONDA, L.O., ODHIAMBO, J.J.O. & PATERSON, D.G., 2012. Indigenous knowledge of climatic conditions for sustainable crop production under resource-poor farming conditions using participatory techniques. *Sustainable Agriculture Research*, 2 (1), 26-31.

NETHONONDA, L.O., ODHIAMBO, J.J.O. & PATERSON, D.G., 2012. Assessment of spatial variability of selected soil chemical properties in a communal irrigation scheme under resource-poor farming conditions in Vhembe District of Limpopo Province, South Africa. *African J. Agric. Res.* 7 (39), 5445-5492.

PATERSON, D.G., SMITH, H.J. & VAN GREUNEN, A., 2013. Evaluation of soil conservation measures on a highly erodible soil in the Free State province, South Africa. *S. Afr. J. Plant & Soil*, 30: 213-217.

PATERSON, D.G., TURNER, D.P., WIESE, L.D., VAN ZIJL, G.M., CLARKE, C.E. & VAN TOL, J., 2015. Spatial soil information in South Africa – situational analysis, limitations and challenges. *S. Afr. J. Science* 111 (5/6). Art. #2014-0178, 7 pages. <http://dx.doi.org/10.17159/sajs.2015/20140178>

Books:

PATERSON, D.G. & MUSHIA, N.M., 2012. Chapter 32. Soil databases in Africa. *In: Handbook of Soil Science: Resource Management and Environmental Impacts (2nd Edn)*. Eds. P.M. Huang, Y Li & M.E. Sumner. CRC Press, Boca Raton FL.

SOIL CLASSIFICATION WORKING GROUP*, 1991. Soil classification. A taxonomic system for South Africa. Institute for Soil, Climate & Water, Pretoria.

* Co-author as member of Working Group

Theses:

PATERSON, D.G., 1998. The use of ground penetrating radar to investigate subsurface features in selected South African soils. Unpublished MSc Thesis, University of Pretoria.

PATERSON, D.G., 2014. The use of palm leaf mats in soil erosion control. Unpublished PhD Thesis, University of Pretoria.

Congress Papers:

PATERSON, D.G., 1987. The relationship between geology and soil type in the northern Kruger National Park. 14th Congress of the Soil Science Society of S.A. Nelspruit, 14-17 July 1987.

PATERSON, D.G., 1990. A study of black and red clay soils on basalt in the northern Kruger National Park. 16th Congress of the Soil Science Society of S.A. Pretoria, 9-12 July 1990.

PATERSON, D.G., 1992. The potential of ground penetrating radar as an aid to soil investigation. 17th Congress of the Soil Science Society of S.A. Stellenbosch, 28-30 Jan. 1992.

PATERSON, D.G., 1995. The complex soil mantle of South Africa. ARC Wise Land Use Symposium, Pretoria, 26-27 Oct. 1995

PATERSON, D.G. & LAKER, M.C., 1998. Locating subsoil features with ground penetrating radar. 21st Congress of the Soil Science Society of S.A. Alpine Heath, 20-22 Jan. 1998.

PATERSON, D.G., 2000. Mapping rehabilitated coal mine soils in South Africa using ground penetrating radar. Eighth International Conference on Ground Penetrating Radar, Gold Coast, Australia, 23-26 May 2000.

PATERSON, D.G. & VAN DER WALT, M., 2003. The soils of South Africa from the Land Type Survey. 24th Congress of the Soil Science Society of S.A., Stellenbosch, 20-24 Jan. 2003.

Land Type Maps:

PATERSON, D.G., 1990. 1:250 000 scale land type map 2230 Messina. Dept. Agriculture, Pretoria.

PATERSON, D.G. & HAARHOFF, D., 1989. 1:250 000 scale land type map 2326 Ellisras. Dept. Agriculture, Pretoria.

PATERSON, D.G., PLATH, B.L. & SMITH, H.W., 1987. 1:250 000 scale land type map 2428 Nylstroom. Dept. Agriculture, Pretoria.

PATERSON, D.G. & ROSS, P.G., 1989. 1:250 000 scale land type map 2330 Tzaneen. Dept. Agriculture, Pretoria.

PLATH, B.L. & PATERSON, D.G., 1987. 1:250 000 scale land type map 2426 Thabazimbi. Dept. Agriculture, Pretoria.

Land Type Memoirs:

PATERSON, D.G., PLATH, B.L. & SMITH, H.W., 1988. Field Investigation. In: *Land types of the maps 2426 Thabazimbi & 2428 Nylstroom. Mem. Agric. Nat. Res. S. Afr.* No. 10. Dept. Agriculture, Pretoria.

PATERSON, D.G., SCHOEMAN, J.L., TURNER, D.P., GEERS, B.C. & ROSS, P.G., 1989. Field Investigation. In: *Land types of the maps 2330 Tzaneen & 2430 Pilgrim's Rest. Mem. Agric. Nat. Res. S. Afr.* No. 12. Dept. Agriculture, Pretoria.

PATERSON, D.G., 1999. 1:250 000 land type survey of the former Ciskei (Unpublished). ISCW Report GW/A/99/24.

Also:

PATERSON, D.G., 1992. Ground penetrating radar applications in USA and South Africa. Report on an official study tour to USA, 13-29 July, 1991. ISCW Report GW/A/92/8.

PATERSON, D.G., 2000. Report on official overseas visit to GPR2000 Conference, Broadbeach, Australia, 23-26 May, 2000. ISCW Report GW/A/2000/40.

Plus ARC-ISCW Reports on:

- Ground penetrating radar investigations in: Kruger National Park; Enseleni, Natal; Weatherly, Maclear; Kleinkopje Mine
- Soil survey investigations at: Roodeplaat, Kathu, Steelpoort River, Palala River, Zeekoegat (Roodeplaat), Limpopo River, Lydenburg, Kendal, Clewer Sand (Witbank), Botha Sand (Witbank), Balmoral Colliery, Bafokeng (Rustenburg), Towoomba (Warmbaths), Hoefeld Stene (Middelburg), Quality Bricks (Witbank), Visagie Sand (Middelburg), Rosslyn, Coalbrook (Sasolburg), Stewart Coal (Delmas), Forzando Coal

(Hendrina), Vaalgro (Vereeniging), Ratanda (Heidelberg), Elspark (Boksburg), Thorncliffe Mine (Steelpoort), Jan Smuts Quarry (Boksburg), Ennerdale (Phase I & II), Thokoza, North Riding, Natalspruit (Alberton), Arnot, Kroondal (Phase I & II), Ga-Rankuwa, Hartebeespoort Dam, Kosmos, Assen, Grasmere, Magalies Moot (Pretoria), Valpre (Paulpietersburg), Cargo Carriers (Sasolburg), Waterval (Rustenburg), Rayton, Bronkhorstspuit, Zwavelpoort (Pretoria), Pietersburg, Trojan Mine (Steelpoort), Platinum Highway (Rustenburg), Moutse, Centurion, Salique (Klaserie), Northam, Greenside Colliery (Witbank), South Deep Mine (Westonaria), Bank Colliery, Steelpoort Platinum, Gautrain Route (Pta/Jbg), Rietspruit Mine (Ogies), Potgietersrus Platinum, Atok Mine (Lebowa), Blue Ridge Mine (Groblersdal), Ngodwana, Estancia (Breyton), Twickenham Mine (Steelpoort), Marikana.

CV Jaco van der Walt

PERSONAL PARTICULARS:

NAME: Jaco van der Walt
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SYNOPSIS

Jaco has been actively involved as a professional archaeologist within the heritage management field in southern Africa for the past 15 years. Jaco acted as council member for the Association of Southern African Professional Archaeologist (ASAPA Member #159) in the Cultural Resource Management (CRM) portfolio for two years (2011 – 2012). Jaco was also a Research Associate with the University of Johannesburg from 2011 – 2013. He is well respected in his field and published in peer reviewed journals and presented his findings on various national and international conferences.

ACADEMIC QUALIFICATIONS:

Date of matriculation: 1995
Particulars of degrees/diplomas and/or other qualifications:
Name of University or Institution: University of Pretoria
Degree obtained : BA
Major subjects : Archaeology
Cultural Heritage Tourism
Year of graduation : 2001

Name of University or Institution: University of the Witwatersrand
Degree obtained : BA [Honours]
Major subjects : Archaeology
Year of graduation : 2002

Name of University or Institution : University of the Witwatersrand
Degree Obtained :BA [Masters]
Major subject :Archaeology
Year of Graduation :2012

EMPLOYMENT HISTORY:

2011 – Present: **Owner - Heritage Contracts and Archaeological Consulting CC.**
2007 – 2010 : **CRM Archaeologist**, Managed the Heritage Contracts Unit at the University of the Witwatersrand.
2005 - 2007: **CRM Archaeologist**, Director of Matakoma Heritage Consultants
2004: **Technical Assistant**, Department of Anatomy University of Pretoria
2003: **Archaeologist**, Mapungubwe World Heritage Site
2001 - 2002: **CRM Archaeologists**, For R & R Cultural Resource Consultants, Polokwane
2000: **Museum Assistant**, Fort Klapperkop.

Countries of work experience include:

Republic of South Africa, Botswana, Zimbabwe, Mozambique, Tanzania, The Democratic Republic of the Congo, Lesotho and Zambia.

MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS:

- Association of Southern African Association Professional Archaeologists. Member number 159
- Association of Southern African Association Professional Archaeologists Cultural Resource Management Section
Accreditation: Field Director Iron Age Archaeology
Field Supervisor – Colonial Period
Archaeology, Stone Age Archaeology and Grave
Relocation
- Accredited CRM Archaeologist with SAHRA
- Accredited CRM Archaeologist with AMAFA
- Co-opted council member for the CRM Section of the Association of Southern African Association Professional Archaeologists (2011 – 2012)

REFERENCES:

1. Prof Marlize Lombard Senior Lecturer, University of Johannesburg, South Africa
E-mail: mlombard@uj.ac.za
 2. Prof TN Huffman Department of Archaeology Tel: (011) 717 6040
University of the Witwatersrand
- Alex Schoeman University of the Witwatersrand E-mail: Alex.Schoeman@wits.ac.za

CV Jaco van der Walt

PERSONAL PARTICULARS:

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MOBILE: +27 82 373 8491
FAX: +27 86 691 6461

SYNOPSIS

Jaco has been actively involved as a professional archaeologist within the heritage management field in southern Africa for the past 15 years. Jaco acted as council member for the Association of Southern African Professional Archaeologist (ASAPA Member #159) in the Cultural Resource Management (CRM) portfolio for two years (2011 – 2012). Jaco was also a Research Associate with the University of Johannesburg from 2011 – 2013. He is well respected in his field and published in peer reviewed journals and presented his findings on various national and international conferences.

ACADEMIC QUALIFICATIONS:

Date of matriculation: 1995
Particulars of degrees/diplomas and/or other qualifications:
Name of University or Institution: University of Pretoria
Degree obtained : BA
Major subjects : Archaeology
Cultural Heritage Tourism
Year of graduation : 2001

Name of University or Institution: University of the Witwatersrand
Degree obtained : BA [Honours]
Major subjects : Archaeology
Year of graduation : 2002

Name of University or Institution : University of the Witwatersrand
Degree Obtained :BA [Masters]
Major subject :Archaeology
Year of Graduation :2012

EMPLOYMENT HISTORY:

2011 – Present: **Owner - Heritage Contracts and Archaeological Consulting CC.**
2007 – 2010 : **CRM Archaeologist**, Managed the Heritage Contracts Unit at the
University of the Witwatersrand.
2005 - 2007: **CRM Archaeologist**, Director of Matakoma Heritage Consultants
2004: **Technical Assistant**, Department of Anatomy University of Pretoria
2003: **Archaeologist**, Mapungubwe World Heritage Site
2001 - 2002: **CRM Archaeologists**, For R & R Cultural Resource Consultants,
Polokwane
2000: **Museum Assistant**, Fort Klapperkop.

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MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS:

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Archaeology, Stone Age Archaeology and Grave
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- Accredited CRM Archaeologist with SAHRA
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REFERENCES:

1. Prof Marlize Lombard Senior Lecturer, University of Johannesburg, South Africa
E-mail: mlombard@uj.ac.za
 2. Prof TN Huffman Department of Archaeology Tel: (011) 717 6040
University of the Witwatersrand
- Alex Schoeman University of the Witwatersrand E-mail: Alex.Schoeman@wits.ac.za



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SUMMARY OF EXPERTISE: SIMON TODD

- Profession: Ecological Consultant
- Specialisation: Plant & Animal Ecology
- Years of Experience: 15 Years

Skills & Primary Competencies

- Research & description of ecological patterns & processes in Fynbos, Succulent Karoo, Nama Karoo, Thicket, Arid Grassland and Savannah Ecosystems.
- Ecological Impacts of land use on biodiversity
- Vegetation surveys & degradation assessment & mapping
- Long-term vegetation monitoring
- Faunal surveys & assessment.
- GIS & remote sensing

Tertiary Education:

- 1992-1994 – BSc (Botany & Zoology), University of Cape Town
- 1995 – BSc Hons, Cum Laude (Zoology) University of Natal
- 1996-1997- MSc, Cum Laude (Conservation Biology) University of Cape Town

Employment History

- 1997 – 1999 – Research Scientist (Contract) – South African National Biodiversity Institute
- 2000-2004 – Specialist Scientist (Contract) - South African National Biodiversity Institute
- 2004-2007 – Senior Scientist (Contract) – Plant Conservation Unit, Department of Botany, University of Cape Town
- 2007 Present – Senior Scientist (Associate) – Plant Conservation Unit, Department of Botany, University of Cape Town.

Experience Specific to the Current Proposal

- Conducted a large number of specialist assessments of wind energy facilities, distributed widely across South Africa and including sites in similar environments to the current study including several sites along the Mossel Bay – Gouritz coastline.
- Provided more than 10 full EIA assessments of wind energy facilities ranging from small developments of less than 20 turbines to very large projects in excess of 500 turbines and 50 000 ha.
- Worked on several wind energy facilities in areas with highly endangered species such as Riverine Rabbits and van Zyl's Golden Mole, which have required specific and specialized attention.
- Extensive experience in renosterveld vegetation types, as occur at the site. Currently supervising a UCT PhD student working on Renosterveld management in the Overberg region.

General Experience & Expertise

- Conducted a large number of fauna and flora specialist assessments distributed widely across South Africa.
- Extensive experience in the field and exceptional level of technical expertise, particularly with regards to GIS capabilities which is essential with regards to producing high-quality sensitivity maps for use in the design of final project layouts.
- Strong research background which has proved invaluable when working on several ecologically sensitive and potentially controversial sites containing some of the most threatened fauna in South Africa.
- Published numerous research reports as well as two book chapters and a large number of papers in leading scientific journals dealing primarily with human impacts on the vegetation and ecology of South Africa.
- Maintain several long-term vegetation monitoring projects distributed across Namaqualand and the karoo.
- Guest lecturer at two universities and have also served as an external examiner.
- Reviewed papers for more than 10 international ecological journals.
- Past chairman and current committee member of the Arid Zone Ecological Forum.
- SACNASP registered as a Professional Natural Scientist, (Ecology) No. 400425/11.

A selection of recent work is as follows:

Specialist Assessments:

Bitterfontein Solar Plant - Fauna & Flora Specialist Assessment. Specialist Report for Cape EAPrac. 2012.

Beaufort West Solar Facility, Erf 7388 - Fauna & Flora Specialist Assessment. Specialist Report for Cape EAPrac. 2012.

Plant Sweeps on Portion 2 of the Farm Demaneng 546, Kuruman District, Northern Cape Province for SA Manganese. 2011.

Proposed Olyven Kolk Solar Power Plant, Northern Cape: Botanical and Faunal Specialist Assessment. Specialist Report for Environmental Resources Management (ERM). 2011.

Klawer Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management. 2011.

Witberg Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management. 2011.

Lambert's Bay Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management. 2011.

Environmental Impact Assessment: Terrestrial Ecology Specialist Study for the Proposed Establishment of a Renewable Energy Facility near Sutherland, Western and Northern Cape Provinces. Specialist Report for Environmental Resources Management. 2011.

Ecological Scoping & Baseline Study. Vleesbaai Wind Park Development. Vleesbaai Independent Power Producers, ERM 2011.

Environmental Impact Assessment: Terrestrial Ecology Specialist Study for the Proposed Establishment of a Renewable Energy Facility near Beaufort West, Western Cape Province. Specialist Report for Environmental Resources Management. 2010.

Environmental Impact Assessment: Terrestrial Ecology Specialist Study for the Proposed Establishment of a Renewable Energy at Konstabel, Western Cape Province. Specialist Report for Environmental Resources Management. 2010.

Environmental Impact Assessment: Terrestrial Ecology Specialist Study for the Proposed Establishment of a Renewable Energy Facility at Perdekraal, Western Cape Province. Specialist Report for Environmental Resources Management. 2010.

Environmental Impact Assessment: Terrestrial Ecology Specialist Study for the Proposed Establishment of a Renewable Energy Facility near Victoria West, Western and Northern Cape Provinces. Specialist Report for Environmental Resources Management. 2010.

Research Reports & Peer Reviewed Publications:

Todd, S.W. 2010. Vegetation and Plant Communities Associated with the Tillite and Dolerite Renosterveld Types of the Avontuur Conservation Area, Nieuwoudtville, South Africa. DRYNET.

- Todd, S.W., Milton, S.J., Dean, W.R.J. Carrick, P.J. & Meyer, A. 2009. Ecological best Practice Guidelines for the Namakwa District. The Botanical Society of South Africa.
- Todd, S.W. 2009. Field-Based Assessment of Degradation in the Namakwa District. Final Report. Mapping Degradation in the Arid Subregions of the BIOTA South Transect. SANBI.
- Todd, S.W. 2009. A fence-line in time demonstrates grazing-induced vegetation shifts and dynamics in the semi-arid Succulent Karoo. *Ecological Applications*, 19: 1897–1908.
- Todd, S.W. 2007. Characterisation of Riparian Ecosystems. D14 of The WADE Project. Floodwater Recharge of Alluvial Aquifers in Dryland Environments. *GOCE-CT-2003-506680- WADE*. Sixth Framework Programme Priority 1.1.6.3 Global Change and Ecosystems.
- Todd, S.W. 2006. Gradients in vegetation cover, structure and species richness of Nama-Karoo shrublands in relation to distance from livestock watering points. *Journal of Applied Ecology* 43: 293-304.
- Benito, G., Rohde, R., Seely, M., Külls, C., Dahan, O., Enzel, Y., **Todd, S.** Botero, B., Morin, E., Grodek, T., Roberts, C. 2010. Management of Alluvial Aquifers in Two Southern African Ephemeral Rivers: Implications for IWRM. *Water Resources Management*, 24:641–667.
- Hahn, B.D., Richardson, F.D., Hoffman, M.T., Roberts, R., **Todd, S.W.** and Carrick, P.J. 2005. A simulation model of long-term climate, livestock and vegetation interactions on communal rangelands in the semi-arid Succulent Karoo, Namaqualand, South Africa. *Ecological Modelling* 183, 211–230.
- Malgas, R.R., Potts, A.J., Oetllé, N.M., Koelle, B., **Todd, S.W.**, Verboom G.A. & Hoffman M.T.. 2010. Distribution, quantitative morphological variation and preliminary molecular analysis of different growth forms of wild rooibos (*Aspalathus linearis*) in the northern Cederberg and on the Bokkeveld Plateau. *South African Journal of Botany*, 76, 72-81.
- Mills, A., Fey, M., Donaldson, J.D., **Todd, S.W.** & Theron, L.J. 2009. Soil infiltrability as a driver of plant cover and species richness in the semi-arid Karoo, South Africa. *Plant and Soil* 320: 321–332.
- Rahlao, J.S., Hoffman M.T., **Todd, S.W.** & McGrath, K. 2008. Long-term vegetation change in the Succulent Karoo, South Africa following 67 years of rest from grazing. *Journal of Arid Environments*, 72, 808-819.
- Hoffman, M.T. & **Todd, S.W.** 2010. Using Fixed-Point Photography, Field Surveys, And Gis To Monitor Environmental Change: An Example From Riemvasmaak, South Africa. Chapter In *Repeat Photography: Methods And Applications In The Natural Sciences*. R.H. Webb, Editor. Island Press. In Press.

CURRICULUM VITAE CANDICE HUNTER

Profession : Social Consultant
Specialisation : Social Impact Assessments (SIA)
Years' experience : 1 year and 9 month

KEY RESPONSIBILITIES

Specific responsibilities as a Social Consultant involve conducting field research; socio-economic surveys; the management and analysis of data; undertaking stakeholder engagement and communication processes; socio-economic baseline data analyses and conducting general social research for a variety of projects. This includes managing and coordinating the Social Impact Assessment (SIA) processes and compiling SIA reports in line with the countries guidelines and legislation.

SKILLS BASE AND CORE COMPETENCIES

- Social Impact Assessments (SIA)
- EIA Legislation
- Data gathering and analysis
- Qualitative and quantitative social research
- Field research and socio-economic surveys
- Baseline socio-economic data analyses
- Stakeholder engagement
- Public participation process
- Communication and community facilitation
- Report writing and review
- Project administration

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- » M. A. Environmental Management: University of Johannesburg (2013)
- » B.A. Honours Tourism Development (Cum Laude): University of Johannesburg (2010)

Courses:

- » Advanced Certificate in Social Impact Assessment (SIA) (Cum Laude): University of Johannesburg (2013)
- » Certificate in Global Reporting Initiative (GRI), Sustainability Reporting Process: Environmental & Sustainable Solutions CC (2012)

Publications:

- » Hunter, C. & Mearns, K. (2015). Assessing the sustainability reporting of selected tourism companies listed on the Johannesburg Stock Exchange (JSE). *African Journal of Hospitality, Tourism and Leisure*, 4(1): 1-18. Publication URL:
http://www.ajhtl.com/uploads/7/1/6/3/7163688/article_51_vol.4_1_2015.pdf

EMPLOYMENT

January 2014 – Current:

Savannah Environmental (Pty) Ltd: Social Consultant

February 2011 – January 2013:

University of Johannesburg: Department of Geography, Environmental and Energy Studies & School of Tourism and Hospitality (STH): Student and Research Assistant.

PROJECT EXPERIENCE

Social Impact Assessment Reports:

- » January 2014: Specialist SIA study for the proposed Gihon Solar Energy Facility & Associated Infrastructure Located near Bela-Bela, Limpopo Province (for Networx SA)
- » March 2014: Specialist social scoping study for the proposed Exheredo Photovoltaic (PV) Solar Energy Facility and associated infrastructure located near Kenhardt, Northern Cape Province (for Kotulo Tsatsi Energy (Pty) Ltd)
- » May 2014: Specialist social scoping study for the proposed Wolmaransstad Municipality Solar Energy Facility and associated infrastructure near Wolmaransstad, North West Province (for Bluewave Capital (Pty) Ltd)
- » July 2014: Specialist SIA study for the proposed Newcastle Solar Energy Facility near Newcastle, KwaZulu Natal (for Building Energy SpA)
- » July 2014: Specialist SIA study for the proposed Pongola Solar Energy Facility near Pongola, KwaZulu Natal (for Building Energy SpA)
- » July 2014: Specialist SIA study for the proposed Senekal 1 Solar Energy Facility near Mkuze, KwaZulu Natal (for Building Energy SpA)
- » July 2014: Specialist SIA study for the proposed Senekal 2 Solar Energy Facility near Mkuze, KwaZulu Natal (for Building Energy SpA)
- » October 2014: Specialist SIA study for the proposed Kotulo Tsatsi Energy Concentrated Solar Power (CSP) Tower Plant 3 facility and associated infrastructure located near Kenhardt, Northern Cape Province (for Kotulo Tsatsi Energy (Pty) Ltd)
- » November 2014: Specialist social scoping study for the proposed Lethabo Solar Energy Facility and associated infrastructure near Sasolburg, Free State Province (for Eskom Holdings (SOC) Limited)
- » November 2014: Specialist social scoping study for the proposed Majuba Solar Energy Facility and associated infrastructure near Amesforort, Mpumalanga Province (for Eskom Holdings (SOC) Limited)

Social Impact Assessment Reports:

- » November 2014: Specialist social scoping study for the proposed Tutuka Solar Energy Facility and associated infrastructure near Standerton, Mpumalanga Province (for Eskom Holdings (SOC) Limited)
- » December 2014: Specialist social scoping study for the proposed 120MW CPV Facility and associated infrastructure near Upington, Northern Cape Province (for Lambrius Energy (Pty) Ltd)
- » February 2015: Specialist SIA study for the proposed realignment of the N10 to facilitate access to the Ilanga CSP Facility site, east of Upington, Northern Cape Province (for SANRL)
- » March 2015: Specialist social scoping study for the proposed Beaufort West Solar Power Plant 1 near Beaufort West, Western Cape Province (for Beaufort West Solar Company 1 (Pty) Ltd)
- » March 2015: Specialist social scoping study for the proposed Beaufort West Solar Power Plant 2 near Beaufort West, Western Cape Province (for Beaufort West Solar Company 2 (Pty) Ltd)
- » March 2015: Specialist social scoping study for the proposed Beaufort West Solar Power Plant 3 near Beaufort West, Western Cape Province (for Beaufort West Solar Company 3 (Pty) Ltd)
- » June 2015: Specialist social scoping report for the proposed Buffels Solar 1 and Solar 2 Solar Energy Facilities, near Orkney, North West Province (for Kabi Solar (Pty) Ltd)
- » July 2015: Specialist SIA study for the proposed Lethabo Solar Energy Facility and associated infrastructure near Sasolburg, Free State Province (for Eskom Holdings (SOC) Limited)
- » July 2015: Specialist SIA study for the proposed Majuba Solar Energy Facility and associated infrastructure near Amesforort, Mpumalanga Province (for Eskom Holdings (SOC) Limited)
- » July 2015: Specialist SIA study for the proposed Tutuka Solar Energy Facility and associated infrastructure near Standerton, Mpumalanga Province (for Eskom Holdings (SOC) Limited)
- » August 2015: Specialist social scoping report for the proposed Paulputs CSP Tower Facility and associated infrastructure, near Pofadder, Northern Cape Province (for Abengoa Solar Power South Africa (Pty) Ltd)
- » September 2015: Specialist SIA study for the proposed AEP Bloemsmond Solar 1 and Solar 2 PV Facilities, near Upington, Northern Cape Province (for AEP Bloemsmond Solar 1 (Pty) Ltd)

Other Projects:

- » June 2014: Screening and pre-feasibility report- Site assessment for the proposed Wind Energy Facility near Van Reenen, KwaZulu Natal and Free State Provinces (for 4Green Development SA)





ENVIRONMENTAL PLANNING AND DESIGN

Jonathan Marshall

Name JONATHAN MARSHALL
Nationality British
Year of Birth 1956
Specialisation Landscape Architecture / Landscape & Visual Impact Assessment / Environmental Planning / Environmental Impact Assessment.

Qualifications

Education Diploma in Landscape Architecture, Gloucestershire College of Art and Design, UK (1979)
Environmental Law Short Course, University of KZN (1997)
Professional Chartered Member of the Landscape Institute (UK)
Member of the International Association of Impact Assessment, South Africa
Certified Environmental Assessment Practitioner of South Africa.

Languages English - Speaking - Excellent
- Reading - Excellent
- Writing - Excellent

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Key Experience

Jon qualified as a Landscape Architect (Dip LA) at Cheltenham (UK) in 1979. He has been a chartered member of the Landscape Institute UK since 1986. He is also a Certified Environmental Assessment Practitioner of South Africa (2009).

During the early part of his career (1981 - 1990) He worked with Clouston (now RPS) in Hong Kong and Australia. During this period he was called on to undertake visual impact assessment (VIA) input to numerous environmental assessment processes for major infrastructure projects. This work was generally based on photography with line drawing superimposed to illustrate the extent of development visible.

He has worked in the United Kingdom (1990 - 1995) for major supermarket chains including Sainsbury's and prepared CAD based visual impact assessments for public enquiries for new store development. He also prepared the VIA input to the environmental statement for the Cardiff Bay Barrage for consideration by the UK Parliament in the passing of the Barrage Bill.

His more recent VIA work (1995 to present) includes a combination of CAD and GIS based work for a new international airport to the north of Durban, new heavy industrial operations, overhead electrical transmission lines, mining operations in West Africa and numerous commercial and residential developments.

VIA work undertaken during the last eighteen months includes assessments for proposed new mine developments in Ghana and Guinea as well as a proposed extension to the Gateway Shopping Centre in Umhlanga.

Visual Impact Assessment Experience

- AngloGold Ashanti, Dokywa (Ghana) – Visual Impact Assessment for proposed new Tailings Storage Facility at a mine site working with SGS as part of their EIA team.
- Gateway Shopping Centre Extension (Durban) – Visual Impact Assessment for a proposed shopping centre extension in Umhlanga, Durban.
- Kouroussa Gold Mine (Guinea) – Visual impact assessment for a proposed new mine in Guinea working with SGS as part of their EIA team.
- Mampon Gold Mine (Ghana) - Visual impact assessment for a proposed new mine in Ghana working with SGS as part of their EIA team.
- Telkom Towers – Visual impact assessments for numerous Telkom masts in KwaZulu Natal
- Dube Trade Port, Durban International Airport – Visual Impact Assessment
- Sibaya Precinct Plan – Visual Impact Assessment as part of Environmental Impact Assessment for a major new development area to the north of Durban.
- Umdloti Housing – Visual Impact Assessment as part of Environmental Impact Assessment for a residential development beside the Umdloti Lagoon to the north of Durban.
- Tata Steel Ferrochrome Smelter - Visual impact assessment of proposed new Ferrochrome Smelter in Richards Bay as part of EIA undertaken by the CSIR.
- Durban Solid Waste Large Landfill Sites – Visual Impact Assessment of proposed development sites to the North and South of the Durban Metropolitan Area. The project utilised 3d computer visualisation techniques.
- Hillside Aluminium Smelter, Richards Bay - Visual Impact Assessment of proposed extension of the existing smelter. The project utilised 3d computer visualisation techniques.
- Estuaries of KwaZulu Natal Phase 1 – Visual character assessment and GIS mapping as part of a review of the condition and development capacity of eight estuary landscapes for the Town and Regional Planning Commission. The project was extended to include all estuaries in KwaZulu Natal.
- Signage Assessments – Numerous impact assessments for proposed signage developments for Blast Media.
- Signage Strategy – Preparation of an environmental strategy report for a national advertising campaign on National Roads for Visual Image Placements.
- Zeekoegatt, Durban - Computer aided visual impact assessment. EDP acted as advisor to the Province of KwaZulu Natal in an appeal brought about by a developer to extend a light industrial development within a 60 metre building line from the National N3 Highway.
- La Lucia Mall Extension - Visual impact assessment using three dimensional computer modelling / photo realistic rendering and montage techniques for proposed extension to shopping mall for public consultation exercise.
- Redhill Industrial Development - Visual impact assessment using three dimensional computer modelling / photo realistic rendering and montage techniques for proposed new industrial area for public consultation exercise.
- Avondale Reservoir - Visual impact assessment using three dimensional computer modelling / photo realistic rendering and montage techniques for proposed hilltop reservoir as part of Environmental Impact Assessment for Umgeni Water.
- Hammersdale Reservoir - Visual impact assessment using three dimensional computer modelling / photo realistic rendering and montage techniques for proposed hilltop reservoir as part of Environmental Impact Assessment for Umgeni Water.
- Southgate Industrial Park, Durban - Computer Aided Visual Impact Assessment and Landscape Design for AECL.
- Sainsbury's Bryn Rhos - Computer Aided Visual Impact Assessment/ Planning Application for the development of a new store within the Green Wedge North of Swansea.
- Ynyston Farm Access - Computer Aided Impact Assessment of visual intrusion of access road to proposed development of Cardiff for the Land Authority for Wales.
- Cardiff Bay Barrage - Concept Design, Detail Design, Documentation, and Visual Input to Environmental Statement for Cardiff Bay Development Corporation.
- A470, Cefn Coed to Pentrebach - Preparation of frameworks for the assessment of the impact of the proposed alignment on the landscape for The Welsh Office.
- Sparkford to Ilchester Bye Pass - The preparation of the landscape framework and the draft landscape plan for the Department of Transport.
- Green Island Reclamation Study - Visual Impact Assessment of building massing, Urban Design Guidelines and Masterplanning for a New Town extension to Hong Kong Island.
- Route 3 - Visual Impact Assessment for alternative road alignments between Hong Kong Island and the Chinese Border.
- China Border Link - Visual Impact Assessment and initial Landscape Design for a new border crossing at Lok Ma Chau.
- Route 81, Aberdeen Tunnel to Stanley - Visual Impact Assessment for alternative highway alignments on the South side of Hong Kong Island.